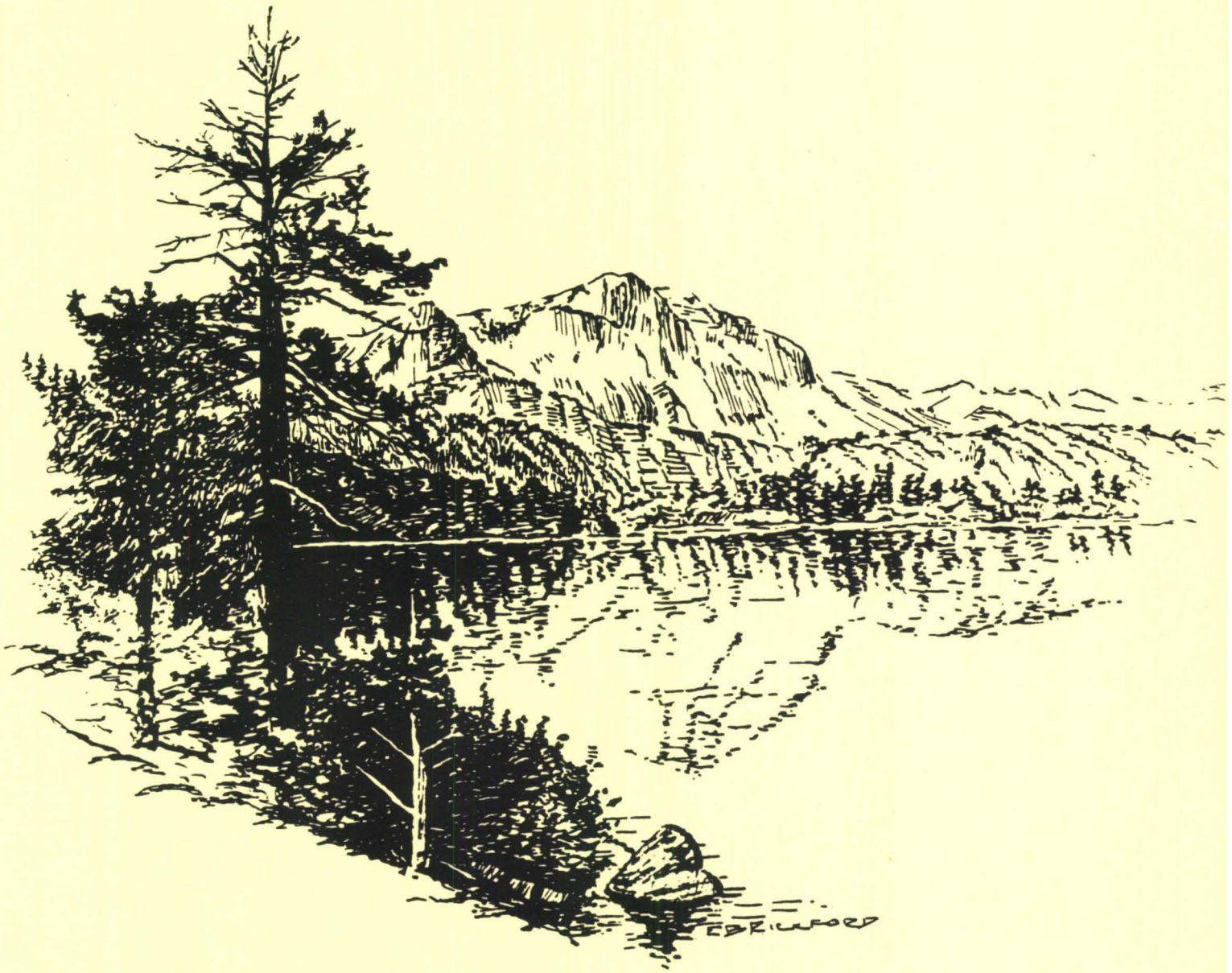
R0093
5930093

DeGraff

DEGRAFF

AN ANALYSIS OF WILDERNESS PERMIT ADMINISTRATION

FOR RATIONING USE ON THE INYO NATIONAL FOREST



82

AN ANALYSIS OF WILDERNESS PERMIT ADMINISTRATION FOR RATIONING USE ON THE INYO NATIONAL FOREST

by
Ernest P. DeGraff, Jr.
Assistant Recreation Officer
Inyo National Forest

USDA, Forest Service
and
Department of Recreation and Park Administration
College of Forest and Recreation Resources
Clemson University

ABSTRACT

In 1971, the Inyo National Forest instituted a mandatory permit system for use of wilderness. As demand increased beyond wilderness capacities, use limitations via trailhead quotas were applied on a case-by-case basis. Quota implementation involved adjacent National Parks and Forests. Interagency cooperation was instrumental in developing a management philosophy, designing and implementing a wilderness permit management system, and gaining public acceptance.

As more areas and trailheads were brought under capacity management, administration of the permit system became more important not only to the public, but also to management. Operating procedures and guidelines evolved to improve service to the public, to provide for fairness to all users, and to increase administrative efficiency within changing constraints of budgets and personnel. The development of administrative procedures in relation to permit administration is discussed in terms of restricted seasons, trailhead quotas, permit application/reservation, permit pickup, organized groups, permit enforcement, and commercial packers.

Data from wilderness permits and reservations in 1982 is analyzed in terms of organized groups, no-shows, and demand for reservation and first-come permits. Several recommendations are made to improve permit administration, including converting the system of capacity management from one of trailhead quotas based on people to one that is based on permits.

TABLE OF CONTENTS

		Page
I.	Introduction	1
II.	Evolution of Capacity Management on the Inyo National Forest	2
III.	Development of Wilderness Permit Administration Procedures	8
	A. Restricted Season	9
	B. Trailhead Quotas	11
	C. Permit Application/Reservation	13
	1. Starting Date for Reservations	15
	2. Telephone Reservations	16
	D. Mail Applications	18
	E. First-Come Availability	18
	F. Permit Pickup and No-Shows	20
	G. Organized Groups	25
	H. Permit Enforcement	27
	I. Commercial Packer Use	29
IV.	Visitor Permit Data Analysis - 1982	30
	A. Subjects	31
	B. Instrumentation and Data Collection	31
	C. Treatment of Data	32
	1. Organized Groups	33
	2. No-Shows	33
	3. Demand for Reservations	34
	4. Demand for First-Come Permits	37
	5. Discussion	41
V.	Summary and Recommendations	44
	References	54
	Appendix	
	A. Visitor's Permit Form	
	B. Reservation Ledger	
	C. Reservation Confirmation Postcard	
	D. Outfitter/Guide Trip Record	
	E. Reservation Handout Information	

I. INTRODUCTION

The Inyo National Forest (Inyo) is one of the most heavily used forests in the nation with recreation use amounting to over eight million visits and 4.9 million 12-hour visitor days. Included in this use are about 700,000 recreation visitor days in wilderness. The Forest issues between 30 and 35 thousand wilderness permits each year to over 120,000 users. The Inyo is within a five hour drive of over 12 million people in southern California, and these users account for about 80 percent of the Forest's recreation use.

An almost continuous strip of wilderness extends over 120 miles from the northern end of the Forest near Yosemite National Park to the Golden Trout Wilderness south of Sequoia National Park. The Hoover Wilderness on the north end of the Forest adjoins the Toiyabe National Forest in Region Four and Yosemite National Park. Yosemite also borders the Minarets Wilderness, whose administration is shared with the Sierra National Forest. The 100 mile long John Muir Wilderness adjoins Sequoia and Kings Canyon National Parks and is jointly administered by the Sierra National Forest. The southernmost Golden Trout Wilderness is jointly administered by Sequoia National Forest and adjoins Sequoia National Park.

The Inyo has required visitors to obtain a permit to enter wilderness since 1971. The purpose of this paper is to document the history of capacity management and the successes and failures of permit administration so that other units can benefit from the Inyo's experience. Another thrust of the paper is to analyze selected wilderness permit data to determine if there are changes which could be made in permit administration that would improve the fairness of the system to the public. The intent of any changes would be to make permit administration more responsive to the visitor's needs while maintaining protection of the wilderness resource.

The public demand to use wilderness on the Inyo National Forest is greater than the supply or capacity during the summer season. In order

to manage this recreation use within determined capacities, it has been necessary to limit entry for overnight users to the numbers of people that can be accommodated. It is important to the Forest Service that any limitation on use be the minimum necessary to preserve and protect the wilderness resource.

The public who uses the wilderness is concerned that the land management agency (Forest Service) administer this limitation on use in an equitable manner. If the public perceives that rationing use is done fairly and honestly, they will support this form of management. If management, knowingly or unknowingly tolerates biases in the system, the public will lose confidence in management. Without that confidence, the Forest Service would soon find it difficult, if not impossible, to manage wilderness use within established capacities with the present system.

This paper will deal with three subject areas on the Inyo National Forest. The first will discuss the evolution of capacity management from the time a permit was required for wilderness entry to the present. The second will deal with the development of procedures used in permit administration from the time restrictions were first imposed on the public until the present. The last subject area will examine selected 1982 wilderness permit data to assess whether or not changes could be made in permit administration procedures that would be more fair to the public and still serve the needs of the wilderness.

II. EVOLUTION OF CAPACITY MANAGEMENT ON THE INYO NATIONAL FOREST

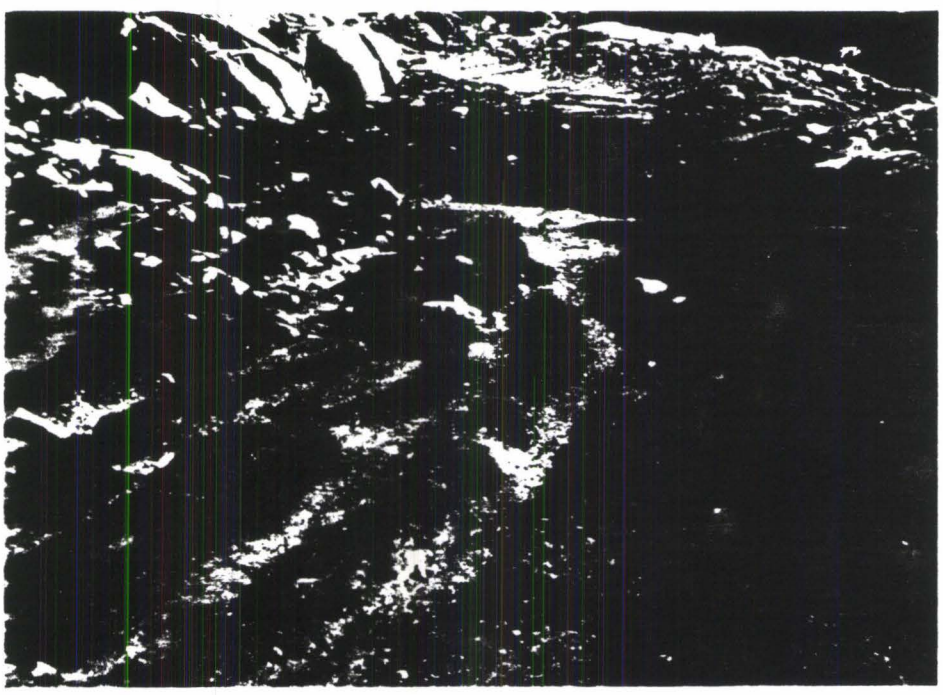
In the several years prior to 1971, the first year a permit was required for entry into wilderness in California, the Forest began receiving complaints from the public. These complaints centered on unsatisfactory conditions within the wilderness. Many areas were overcrowded on weekends; litter left behind by users was commonplace; and the physical resource showed signs of overuse. Vegetation was trampled and damaged by thoughtless users; campsites were common in sensitive areas such as meadows. Users cut limbs from trees for

firewood and campfire rings proliferated in popular camping areas. In some areas, e.g. the Mt. Whitney Trail, the disposal of human waste became a problem.

At the same time that the public was bringing this degradation to the attention of management, wilderness rangers were observing the same conditions. Weekly diaries turned in by wilderness rangers noted this deterioration of both the physical resource and the social environment.

In 1971, the Regional Forester for the California Region signed a Regional Order requiring a permit for entry into all wilderness in California. The objective of the Order was threefold. First, the permit would require a contact between the user and the Forest Service, which could be used for disseminating information and improving visitor behavior. Second, the data recorded on the permit could be used by management in understanding use and travel patterns and in writing or updating management plans. And last, the permit could be used to ration use in those places where management actions other than rationing were unsuccessful. Lime and Buchman (1974) have suggested many additional ways in which information on the wilderness permit can be used both by management and the public.

Figure 1 - Resource damage from multiple trails, John Muir Wilderness.



In 1973, Sequoia and Kings Canyon National Parks (SKNP) expressed a desire to hold their backcountry use to a level that did not exceed the 1971-1972 use level. At that time a decision was made to limit overnight use by imposing quotas at selected trailheads. This was done via the wilderness permit. Since the Park was using the same permit format as the Forest Service, interagency implementation went smoothly. Permits written by one agency were honored by the other. This made sense, since most of the public did not draw a distinction between Forest and Park lands.

A joint proposal for limiting use on selected trailheads into Kings Canyon National Park was approved for the 1973 season. The selected management alternative called for limiting use at the trailhead rather than at the Park boundary, which in most cases was a day's journey from the trailheads. Only those trailheads feeding travel zones that showed evidence of drastic overuse would initially have quotas.

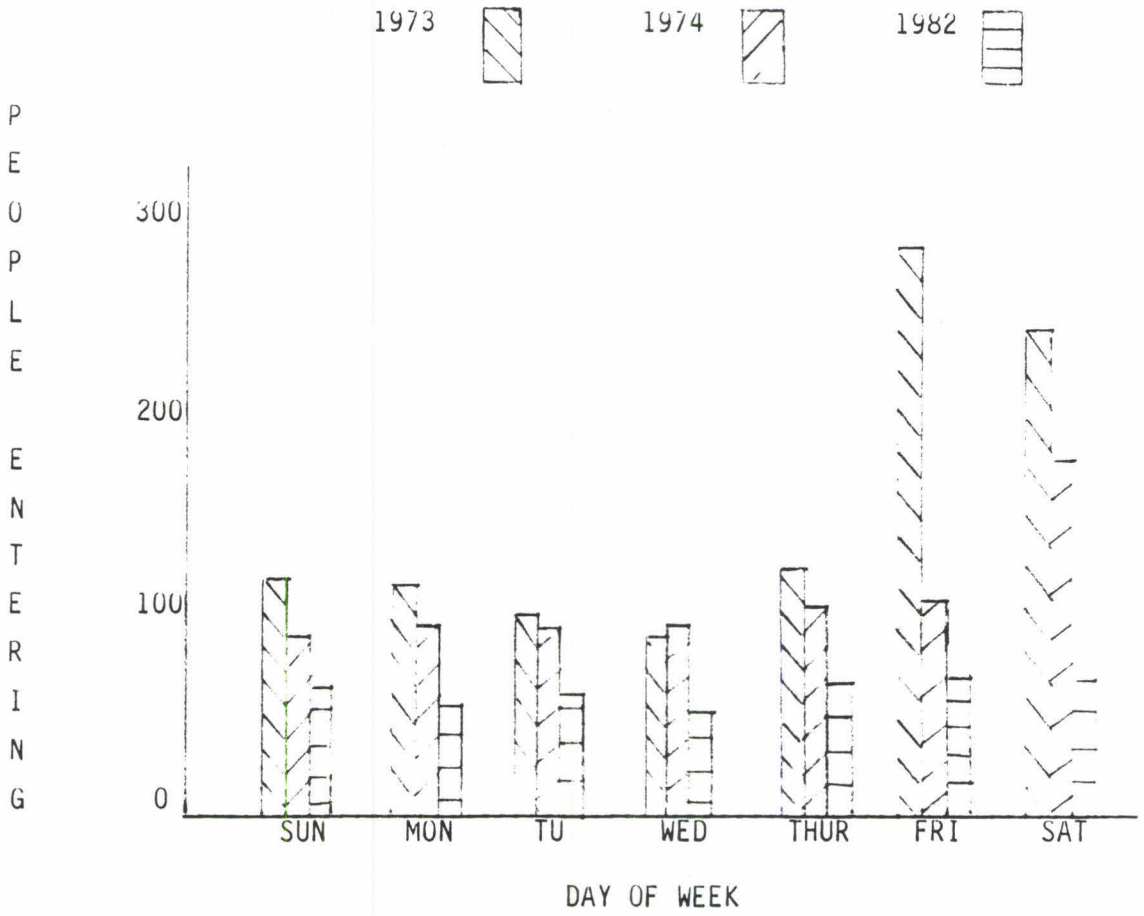
At the same time that SKNP and the Inyo National Forest were implementing quotas, Yosemite National Park also started restricting use into zones that were overused. In 1977 they changed from a system of limiting use by zones to one of limiting use via trailhead quotas. Whether by design or accident, Yosemite's philosophy of management parallelled that which was agreed to by the Forest and SKNP. Bury and Fish (1980) documented the problems resulting from lack of management coordination between adjacent units. The interagency philosophy that developed espoused management that, where necessary, use would be limited through exterior trailhead quotas, so as to minimize the need for any interior restrictions. Once a party had a permit for entry, they would be free to go wherever they chose or change their planned itinerary, and be subject only to those few interior restrictions still necessary to correct past abuses or which would promote wise use of the wilderness. Freedom of choice within wilderness (actually defacto wilderness in the Parks) was a cornerstone of this philosophy.

The management strategy for enforcing the permit requirement was critical. At first, parties encountered without a permit were issued one

in the field. No citations were issued; the objective was to get the public used to obtaining a permit for entry. A year after quotas were initiated, written warnings to parties without a permit were issued and kept on file. In the last few years of the 70's, enforcement was strengthened by telling violators that a second offense could result in a citation. This gradual tightening of enforcement prevented an almost certain backlash from the public that would have occurred had the agencies taken a "game warden" approach initially.

In 1974, the Regional Forester approved an interim plan for restricting use on the Mt. Whitney Trail in the John Muir Wilderness. This was the first use limitation proposed by the Inyo National Forest. Much of the overuse on the Mt. Whitney Trail occurred on weekends, while weekday use remained low. An immediate result of implementing a trailhead quota was a reduction of peak use on weekends and an increase in mid-week use as shown in Figure 1. Total use for the season has not shown a dramatic decrease, but use has been redistributed over the entire week. The trailhead quotas the previous year on Kearsarge, Bishop, and Piute Pass trails were proposed by the Park, even though implementation was effected by the Forest at the trailheads as part of a cooperative agreement. The Forest put a lot of effort into informing and educating the public as to the need for limiting use on the Mt. Whitney Trail, which was and still is the most heavily used trail in the John Muir Wilderness. A CBS telecast explaining conditions on the Trail and the need to limit use received nation-wide distribution.

Figure 2 - Number of People Entering Mt. Whitney Trail - August



In 1974, the first interagency wilderness manager's meeting was held at Mammoth Lakes, California between the Inyo National Forest and SKNP. The meeting was attended by wilderness supervisors from the ranger districts and was structured to solve field-level problems. A suggestion was made to include adjacent forests and Yosemite National Park at future meetings. Meetings have been held once or twice each year from 1974 to the present. The group now includes field level people from the Sequoia, Inyo, Sierra, and Stanislaus National Forests in Region Five and the Toiyabe National Forest in Region Four. Yosemite, Sequoia, and Kings Canyon National Parks are also represented. The purpose of these meetings is to coordinate wilderness and backcountry management policies, resolve problems and conflicts between adjacent units, and to standardize operating procedures as much as possible to benefit the public. This group has also produced several interagency wilderness brochures which are made available to all wilderness users.

The intent of these brochures is to positively affect user behavior in the backcountry and wilderness.

Initial trailhead quotas for the John Muir Wilderness were determined by various means. The Bishop Creek Study (Armstrong 1974) outlined a method for determining carrying capacity and relating it to exterior trailhead quotas. Information on the wilderness permit was valuable in determining such things as average party size and length of stay. Travel zone capacities were based on the ability of the zone to accommodate overnite users. The zone capacities varied according to the experience level determined for that zone. Dr. Perry Brown's stratification of wilderness experience levels into Pristine, Primitive, Semi-Primitive, and Transition were used as guidelines. Density, in terms of occupied campsites, would be lower for Pristine than for Primitive, etc. The campsite was the key factor in determining capacity and in subsequent monitoring to determine the effects of limiting use. Standard Code-A-Site (Hendee et al. 1976) forms were used to record inventory data. Frissell's (1978) campsite condition class rating is being incorporated into the data base on Code-A-Site cards to aid in monitoring.

A computer program, titled QUOTA, was developed by Dr. Jan Van Wagtendonk of Yosemite National Park. It was used on the Minarets Wildernesss to help determine initial trailhead quotas, which went into effect on the Inyo in 1980. The computer was able to take into account complicated use patterns, whereas the Bishop Creek method worked well where use patterns were simple and involved only one or two zones served by one trailhead.

The Inyo experienced a "ripple" effect after initiating trailhead quotas. Nearby areas served by trailheads without quotas soon showed an increase in use at or above capacity. This necessitated instituting quotas the following year to bring use in-line with capacity. The Sierra National Forest most likely experienced a growth in use due, in part, to the difficulty of obtaining a permit from the Inyo (east) side.

When wilderness use equalled or exceeded capacity in 1980, the Sierra National Forest decided to implement trailhead quotas on all their trails leading into both the John Muir and Minarets Wildernesses in 1981. The groundwork for trailhead quotas had already been set by adjacent Parks and the Inyo National Forest, so the public did not need to be "sold" on this form of management. However, a good information program by the Sierra National Forest helped inform the public of the change in management, resulting in good first year compliance with the permit under a system of quotas. Lime and Lorence (1973) reported good compliance with the permit requirement in the Boundary Waters Canoe Area because of good efforts at informing visitors. Van Wagtendonk and Benedict (1980) found that 86 percent of respondees to a questionnaire favored a quota and permit system for overnight users in Yosemite National Park.

At the present time, almost all trailheads leading into the John Muir Wilderness, Sequoia and Kings Canyon National Parks, Minarets Wilderness, and Yosemite National Park are under quotas. The Toiyabe National Forest will implement trailhead quotas in the Hoover Wilderness in 1983 that will apply to people entering Yosemite National Park. The public has accepted restricting use to capacity by trailhead quotas, but they are taking a more critical look at how this system is administered by the various units. How the permit system has been administered is the subject of the second part of this paper.

III. DEVELOPMENT OF WILDERNESS PERMIT ADMINISTRATION PROCEDURES

Part of Chapter II outlined how the Region and Forest implemented a permit system for use of the wilderness. Administration of the permit system was fairly simple without limitations on use. However, when the permit was used to ration use, an additional set of procedures became necessary to effectively deal with the public and implement a cost effective system of permit administration. There were no written guidelines as to which methods might give the best results. The system now in effect on the Forest essentially evolved through trial and error.

Exchange of information between adjacent units, which were also managing to capacity via the wilderness permit, proved helpful. This chapter will discuss the development of specific aspects of permit administration as they relate to rationing use.

A. Restricted Season

Analysis of use prior to 1973, the first year the Forest restricted use, showed that use increased markedly after the middle of June, when school let out for the summer in southern California. Wilderness use also dropped after the middle of September when school reopened. Since the philosophy of management agreed to by SKNP and the Inyo was to only restrict use when and where necessary, the period when use would be restricted was initially set at June 15 to September 15 inclusive.

Yosemite National Park also agreed to the same restricted use season when they started restricting use in 1973. However, Yosemite observed a tremendous demand for permits over the Memorial Day weekend (Van Wagtendonk 1981). Field observation revealed extensive crowding and onsite damage resulting from this overuse at a time when the wilderness was vulnerable to human use. This vulnerability was due to wet conditions and extensive snowpack, which reduced capacity and caused people to crowd into those areas free of snow. As a consequence, the Park temporarily implemented their quota system over that weekend, and then removed it until June 15. SKNP also implemented quotas on trailheads accessing areas popular on Memorial Day weekend.

The Inyo National Forest first implemented Memorial Day weekend quotas on the Mt. Whitney Trail in 1977. Analysis of the number of users by trailhead on the Mt. Whitney District also revealed use exceeding quotas (capacity) on weekends. This overuse occurred on popular trails through October when "Indian summer" conditions prevailed. On this southernmost district of the John Muir Wilderness, the restricted season when quotas are in effect was changed to include Memorial Day weekend through October.

Figure 3 - Mt. Whitney summit, Labor Day, 1972. Over 1,300 people attempted the climb over the 1972 Labor Day weekend.

Three trailheads accessing habitat of the rare California Bighorn Sheep are restricted yearlong to afford protection to the sheep. A popular mountaineering trailhead within critical sheep habitat is open for only two time periods during the year. This restriction was negotiated between the Forest, an active southern California climbing group, and Dr. Weyhausen, a foremost expert on this band of bighorn sheep.

In most of the central Sierra, the present restricted use season is June 15 to September 15. However, the Sierra National Forest looked at their use (demand) figures for June and September, and delayed the start of the restricted season until July 1. Demand for permits after Labor Day was also not sufficient to justify quotas. In subscribing to the philosophy of not restricting use unless there is a need, this adjustment in restricted season dates benefited the public by removing an unnecessary restriction.

Wilderness management plans authorize restricting entry when demand exceeds capacity. In heavy snow years, such as 1982, capacity is lowered, even as late as early July. Simple adjustments, such as not reissuing no-shows, can help to keep use within estimated capacity. Entry quotas could also be lowered to levels which more closely match capacity. No finite formula exists for determining the proper level of use. In situations of early season use where snowpack reduces capacity, the wilderness managers must use their best judgment based on field conditions.

B. Trailhead Quotas

As mentioned earlier, the management philosophy which evolved in the central Sierra was one of managing use through exterior trailhead quotas. Because the wilderness areas are large and contiguous, managers felt that the individual user's freedom of choice could be preserved within the wilderness and restrictions would apply externally at the trailhead. Once an individual had a permit to enter wilderness, he would be free to camp wherever he chose or change his itinerary, and be subject only to these few interior restrictions necessary to manage specific sites or correct past abuses. This philosophy of management contrasts with one which assigns camping areas or campsites to parties within the wilderness. Sometimes users are also restricted not only in space, but in time, i.e. campsites must be occupied on the authorized date. This form of capacity management is often necessary for small wildernesses where the opportunity to disperse is limited.

Initial efforts at determining quotas were rough at best. Management realized the need to start somewhere, and initial numbers were often the manager's best guess at the time. Some quotas were set at 25, because this was the maximum group size permitted by the Regional Forester. Some of these early quotas have proved surprisingly effective and have permitted use that was close to capacity.

However, as the need increased to apply quotas to more trails, it became apparent that some methodology would be needed to determine initial quotas. In 1974, the Regional Forester approved the Bishop Creek Study, which included the methodology for inventorying wilderness conditions and relating capacity, group size, and length of stay to external trailhead quotas. This method worked well for the east side of the John Muir Wilderness where trails were steep and only one trail passed through a travel zone. Use in the first two zones could usually be related directly to one trailhead.

When the Forest first considered implementing quotas into the Minarets Wilderness in 1979, it was apparent that the Bishop Creek method would be difficult to apply. The travel zones were interconnected by many trails, and overused areas could be accessed in one day via several trailheads. It was not possible to relate use in a zone to just one trailhead.

Dr. Van Wagtendonk of Yosemite has developed a computer program called "Quota", which requires a data base consisting of information on the wilderness permit and overnite capacities by travel zone. The computer program takes into account how visitors use the wilderness by including travel zone sequences in the data base. An assumption is made that the user will continue to use the wilderness in a similar pattern each year. The manager assigns his best estimate of quotas to each trailhead, and the computer produces an output that shows use as a percent of capacity for each zone. The ideal output would show 100 percent use for each zone. In reality, that never happens. But through trial and error adjustment of quotas, each successive output should strive to balance travel zone use as close as possible to 100 percent for all zones. The best scenario of quotas is then given to the manager for political/administrative adjustments. After adjustments are made, one final computer run is made which shows the manager what he can expect in terms of zone use for the selected quotas.

Initially, managers made their best estimate of capacity for travel zones. After the Bishop Creek Study was approved, districts started using Code-A-Site forms to record inventory data on campsites. This provided the data base from which the manager could determine zone capacities. The optimum number of occupied campsites along with the average party size were used to determine zone capacities. In a simplistic example, the zone capacity (which is the optimum number of occupied campsites multiplied by the average party size) would be divided by the average length of stay in nights to arrive at a trailhead quota.

A key to administering the quotas was making adjustments which reflected conditions on-the-ground. Feedback from the public and wilderness rangers was used to "fine-tune" quotas, so that both the social and biophysical components of the wilderness environment were protected.

An important factor in gaining public acceptance of the quota system of management, was only implementing quotas on trailheads that accessed areas receiving overuse. At present, there are only a few trailheads without quotas into the John Muir Wilderness. Only one trailhead in the Golden Trout Wilderness has a quota because it accesses Sequoia National Park. However, the approved management plan for the Golden Trout Wilderness authorizes initiating trailhead quotas on a case-by-case basis when use exceeds capacity.

C. Permit Application/Reservation

Probably no other category of permit administration has undergone more change. A key to successful implementation of the Inyo's (and other units) permit system was making the permit available to the public. At first, permits were available at ranger stations by mail, phone, or in-person. Campground caretakers and wilderness rangers also issued them in the field. The rationale was to get the public used to the permit system and make it as "hassle-free"

as possible. Enforcement of the permit requirement will be dealt with in a later section.

When quotas were first instituted in 1973, the Forest set aside 100 percent of the quota for reservation. This proved to be no problem, since most of the quotas did not fill up, and there were ample spaces available for first-come users. After an interagency meeting with the Parks, the White Mountain Ranger district split their quotas 50/50 for reservation/first-come users in 1974. This coincided with the system in effect for the Parks. However, the Mt. Whitney district retained the 100 percent reservation system, partly because of demand to use the Mt. Whitney trail. It was thought at the time, that advertising first-come availability of permits might encourage too many people to take a chance on obtaining a first-come permit. The applicants for the Mt. Whitney trail are mostly goal oriented, i.e. they want to climb the mountain. If first-come demand exceeds supply, there is no suitable alternative to offer. In 1974 through 1976, permits had to be picked up in-person during the restricted season; this allowed the two districts to account for no-shows, which equalled or surpassed the demand for first-come permits. Mt. Whitney district found that even with a 100 percent reservation system, the no-shows created enough vacancies to accommodate almost all the first-come users. The White Mountain district may have inadvertently undersubscribed the wilderness if the demand for first-come permits was significantly below availability because of no-shows.

With reduced budgets in 1977, the Forest decided to mail out all reserved permits and not require personal pickup, which, at the time, was thought to require extended office hours. With a 100 percent reservation procedure, the Mt. Whitney District had to guess at the percentage of no-shows in order to meet first-come demand, relying on intuition, snowpack, and the weather to make adjustments on how many vacancies could be expected. The White Mountain district changed the portion of the quota available for reservation from one-half to two thirds. On the weekend days of

Friday and Saturday, the one third available for first-come was not enough to satisfy demand. Additional vacancies were made available based on estimated no-shows.

In 1979, the White Mountain district, in order to promote uniformity forest-wide, went to a 100 percent reservation basis with all permits being mailed out. The results were unacceptable, to say the least, with chaos resulting at the front desk on Friday and Saturday from first-come applicants exceeding vacancies. There was no systematic way to account for no-shows, so that it was never certain as to the actual status of the quotas. The district reverted to a two thirds reservation system in 1980 and 1981.

In the last few years of the seventies, the public became aware of the differences in administration procedures between the two districts which had quotas. The Mammoth Lakes district started reservations in 1980, and patterned their system after White Mountain. Questions about unequal treatment, differences in reservation procedures, and accounting (or lack of) for no-shows reached a peak in 1981. Several important changes were made in permit reservation procedures on the Inyo National Forest for 1982 which greatly improved service to the public and restored fairness to the system. The changes were as follows:

1. Starting Date For Reservations

   Since 1973, reservations had been taken starting February 1. However, budget cutbacks and reduced personnel to process applications caused a reevaluation and decision to move the date forward to March 1. The Sierra National Forest concurred with this date, thereby providing uniformity for the John Muir and Minarets Wildernesses. Both Parks continued to take reservations on February 1, but that did not seem to be a problem with the public. SKNP has decided to change to March 1 starting in 1984.

2. Telephone Reservations

Phone reservations were not accepted in 1982. Yosemite National Park had never taken phone reservations since quotas were put into effect in 1973, so in essence the Forest's management policy was changed to agree with that of the Park. SKNP and the Sierra National Forest continued to take phone reservations in 1982. However, in 1984, SKNP has decided not to accept phone reservations. They will use 1983 to inform the public of the impending change.

Analysis of the phone situation on the Forest showed that phone reservations were receiving preference over mail applications. Demand (use) for phone reservations was so great after February 1, that districts spent all day on the phone for weeks just answering that demand. Meanwhile, mail applications stacked up, and when time was found to process them, popular dates were already filled, even though mail applications may have been received when there were openings available. This situation resulted in extra correspondence with the public and additional administrative expense. Eliminating phone reservations excluded the bias favoring that mode of communication and helped restore faith in the system by the public.

An important selling job in relation to not taking phone reservations helped secure public approval. Parties familiar with the old system began calling on February 1. They were informed of the new March 1 date for reservations and that only mail or in-person requests would be honored. Management also took the time to explain the reasoning behind the change, and the reasoning was logical and fair. This "extra effort" to explain helped gain acceptance by the public. To illustrate the anxiety with which some of the public viewed their opportunity to reserve a permit, the Forest recorded users driving over 250 miles from southern California just to be there on March 1 and assure themselves of a reservation. The Forest has discouraged

that practice by including all in-person requests on March 1 with the mail requests postmarked March 1. There is no advantage to showing up in-person on March 1 to apply for a permit.

The unplanned coincidence of moving the starting date from February 1 to March 1 while eliminating phone reservations proved helpful. People calling for reservations on February 1 were then made aware of the March 1 postmark data for accepting applications. This gave them the opportunity to have their application considered in the first priority processed.

The Forest received approval to test a computer reservation system for wilderness permits. A software program has been written that will replace the record keeping system that is now done by hand. The computer program can display the reservation status for all trailheads for any day of the season. When the program is fully operational, permits for any trailhead on the Forest can be written from any ranger station.

The computer will record all the information on the permit form, and will periodically store this information on tape. By the middle of September, this information can be edited and run through the VIPER program to determine wilderness use for RIM reporting.

The Forest is considering limiting the acceptance of reservations to 90 days prior to the start of a trip. This would eliminate the tremendous influx of applications the Forest now receives shortly after March 1. Fewer people would be needed to process applications if the workload was spread over a longer period of time. However, there would be more effort required at constantly determining the 90-day period within which to accept applications. A 90-day period would also shorten the planning period that organized groups and individuals would have in order to secure vacation time. This idea has not been tested with the public and may not receive support. Adjacent units have not responded favorably to this idea.

D. Mail Applications

Mail applications always have and probably always will be received for wilderness permits. In addition to changing to a March 1 postmark date in 1982, preprinted applications asked the applicant to list a second and even third choice of starting dates and/or trailheads. This has greatly reduced the number of applications sent back because the quota was full on their only choice. In addition to being inexpensive to the public, mail applications provide flexibility for management. They do not demand the instant response that is associated with the phone or in-person requests. Applications postmarked prior to March 1 would be returned. This gave the public some measure of control for consideration. A five day period was allowed for the March 1 postmark date to clear the mail. All reservations postmarked March 1 or received in-person on March 1 were put in a box and a lottery method was used to fill requests. The same thing was done for March 2, 3, 4, etc. until the backlog was processed, after which applications were processed as received. To illustrate the workload, the Mt. Whitney and White Mountain districts received 1,500 and 900 applications respectfully that were postmarked on March 1. Both of these districts process between 20,000 and 25,000 wilderness applications annually. The lottery system for initial processing of applications was fair to all and accepted by the public.

E. First-Come Availability

When use limitation was first started in 1973, most units agreed that at least a part of a quota should be available for people on the day of the trip. Many weekend trips are conceived on short notice, and some permits should always be available for these type of trips.

Agreement between districts was reached in 1982 that approximately half of each quota would be available for reservation and the other half would be available for first-come on the day of the hike. In

previous years, the percent reserved varied from 100 percent to 67 percent to 50 percent. The only exception in 1982 to this 50/50 split was the Mt. Whitney trail, where 100 percent of the quota would be reserved in advance. The logic behind this exception is that if the public thought that they could get a first-come permit for Mt. Whitney, that would lead to long lines for permits, many turnaways, and a lowered compliance. People that apply for a permit to climb Mt. Whitney are generally focused only on that trail and are not receptive to other alternatives. It would be unfair to the public to "invite" their taking a chance on getting a permit when the chances are slim that demand would equal supply.

The actual percent of the quota available for reservation may vary somewhat between trailheads. Low demand trails (less popular) can withstand a two thirds reservation portion because first-come (and reserve) demand is low. No-shows also allow a greater portion of the quota to be reserved with some confidence that demand will not exceed supply. On popular trails on the Inyo, a 50/50 split between reservations and first-come permits comes closer to matching the higher demand on Friday and Saturday for both type of permits. However, the Sierra National Forest has determined that a two-thirds reservation/one third first-come split comes closer to meeting their demand situation.

One situation the Inyo has been successful in avoiding is having the public at the front desk on Saturday morning with no trailhead openings available. This type of confrontation situation at the front desk could seriously agitate people who have driven great distances to backpack only to find everything "full". There have always been "safety valve" alternatives available, i.e. areas not yet under quotas or no-shows that become available on the day of the trip. This situation is worth careful evaluation to insure that it doesn't occur.

Occasionally there were long lines at the door on Friday or Saturday when the office opened. When the Mammoth Lakes district first

started quotas in 1980, the front desk was overrun with people when the doors opened. In all the confusion, it was nearly impossible to provide an atmosphere conducive to a quality contact with the user. To solve this problem, the Forest borrowed a system in use at many banks. Users were asked to organize themselves into a line in the same order they arrived or as would be listed on a signup sheet. The district would ask one or two user groups to come inside at one time, depending on staff available. This reduced noise and confusion and promoted a quality contact with the user.

F. Permit Pickup and No-Shows

This is one of the most important areas of permit adminitration, and one which has the potential to "make or break" a system which relies on the visitor permit as a means to manage use. From 1971 through 1973, permits were mailed to applicants or were available at issuing stations. After a year of use limitations in 1973, management became concerned about no-shows for those permits that were mailed. In 1974, 1975 and 1976 the public was asked to pick up their permit in person at various points on the two districts with quotas.

To accommodate the public, the Forest Service extended office and entrance station hours to meet the needs of the user. Reservations were taken by phone or mail, and a written confirmation was mailed to the public if time permitted. On short notice phone reservations, the public was told where and when to pick up their permit. Permits were written when the party showed up for the trip. The advantage of this system was that permits were written only for parties that actually made the trip. No time was spent writing permits for parties that cancelled, a considerable savings when an average of 40 percent did not show up for a permit.

One immediate benefit of personal pickup was that the respective administrative offices, in this case the Mt. Whitney and White Mountain ranger districts, knew just how many people claimed their

reservations. No-shows were then made available to first-come applicants. This was important for the Mt. Whitney District, since the entire quota could be reserved in advance. When reservations filled the quota, the only permits available for first-come applicants were the no-shows.

Analysis of no-shows in 1975 for all trailheads on the Mt. Whitney Ranger District showed that an average of 50 percent of the people who made reservations for August trips failed to take their trip. The no-shows were due to two reasons: The entire party cancelling or a reduction in party size from planned to actual.

Several factors could be responsible for entire party cancellations. When reservations are made in February or March for trips in the summer, there is a good chance that plans could change. Factors such as a lingering snowpack, poor weather, change in vacation time, sickness, etc. could result in entire parties cancelling their plans. However, reductions in party size most likely result from overbooking at the time a reservation is made. There is no charge for the permit or reservation, so money is not a factor. Reservations fill fast for popular trailheads, so the chance of adding additional members to a party declines quickly with time. No doubt groups "pad" their party size in order to preserve the option of including friends. Or perhaps the original estimate of trip members was too optimistic. The cumulative effects of cancellations and overbooking results in this high no-show factor which must be taken into account by management.

Budget cutbacks in 1977 and succeeding years forced management to evaluate administrative procedures to reduce costs. Entrance station operation and extended office hours were reduced or eliminated, thus saving salary costs. Personal pickup was eliminated in favor of mailout of reserved permits. Administrative judgment, based on past "experience", and interpretation of the effects of environmental factors, such as snow pack and weather, was substituted for actual counts of no-shows. This put a difficult burden

on the seasonal hires who administered the day-to-day operations of the permit system. In essence, the Forest Service was guessing as to the no-show factor on a daily basis, and making estimates of how much to increase the quota to allow for the unknown no-shows. At best, this was an uncomfortable position.

Somewhere near the turn of the seventies to the eighties, the public became more concerned about the system used to manage the use restrictions. They questioned how management arrived at quotas, took into account no-shows, and processed applications. Management started to take a closer look at the system. Was it fair? Did it serve the needs of the user and the wilderness? Could administrative procedures be defended to users?

No-shows definitely stood out as a problem area. A change in policy was agreed to for 1982 which removed the uncertainty surrounding no-shows. Users had to personally pickup their permit at a specified point no more than 24 hours in advance of the trip, but at least by 10 a.m. on the day of departure. In 1974 through 1976 permits were not written in advance and office hours were extended so that permits could be written when the party arrived. With smaller budgets in 1982, it was agreed to write the permits in advance and put them in an after-hours pick-up box outside the office door. This procedure was outlined to the user (see appendix) when they received written confirmation of their reservation. The pickup box allowed the Forest Service to close the office at the end of a normal workday, but provided the public with a means to acquire their permit at their convenience. Any unclaimed permits were brought inside when the office opened in the morning and no-shows were released to first-come users after 10 a.m.

Another source of no-shows mentioned earlier was overbooking. In 1982, it was not possible to accurately determine no-shows resulting from a reduction in party size from planned to actual. For those few reserved permits that were picked up after offices opened, it was possible to verify party size and reissue the differ-

ence. But those few permits were too small of a sample size to project with confidence, the number of no-shows from overbooking that might have occurred on permits picked up overnight.

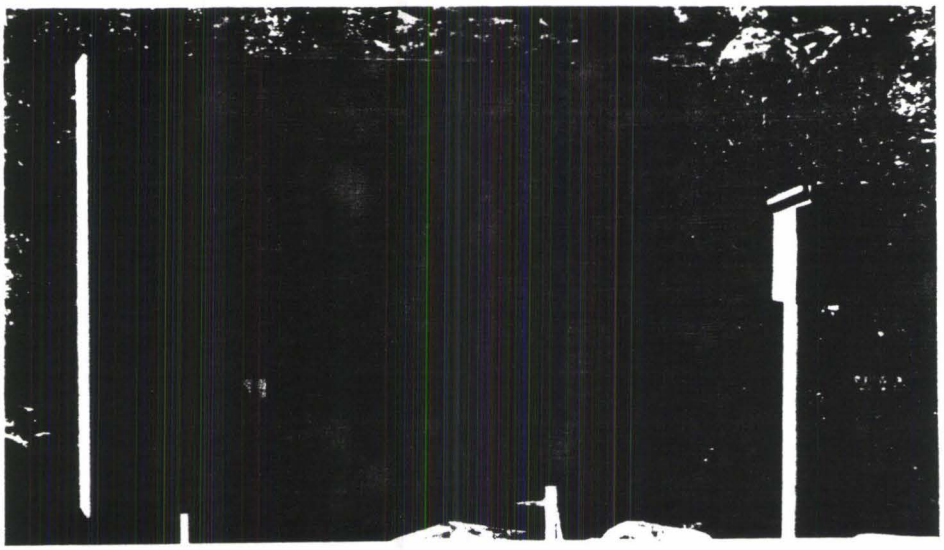
In 1983, the user who picks up his permit overnight will be asked to verify his party size. A trailhead register will be posted next to the pickup box and the user will be asked to record the name of the person on the permit and the actual number of people in the party. A comparison can then be made with the reservation ledger and no-shows reissued to the public.

The honor system was used for after-hours pickup. The only two complaints in 1982 resulted from the failure of the Forest Service to put the permit in the pickup box the night before the trip. No permits were stolen. However, a vandal did throw some permits in a creek, but the district was able to retrieve them. Even if theft or vandalism did occur, parties could be reissued permits after the office reopened. The gain in public service and cost savings to the Forest Service is worth the risks involved with a pickup box. An important deterrent to theft was placing each permit in a sealed envelope with only the permittee's name on the outside. Prospective thieves were discouraged by not being able to determine party size or trailhead for permits in the envelopes.

As previously mentioned, a key to making a mandatory permit system work is being able to make the permit available to the public <u>when</u> they want it. The pickup box not only serves this need during the restricted season, but also serves the user during the off-season. Because of uncertain weather in the off-season, people often phone for a permit on short notice. A permit can be written and put in

the box for pickup at the user's convenience. Trailhead displays (Figure 4) help influence behavior, especially in those cases where there is no personal contact with the user.

Figure 4 - Informational trailhead display, John Muir Wilderness, Inyo National Forest.



Winter use in the Sierra has been on the increase. Each district has a system for self-issuance of permits in the off-season. The permits are prestamped for off-season use so they can't be used during the restricted season. The self-issuing stations also show current avalanche conditions, weather forecasts, and road conditions. The Forest asks the user to record the license number of their vehicle on the permit, so that in the event of an emergency, authorities can ascertain if the party is still in the wilderness.

Evaluation of 1982 permit issuing procedures revealed that on Friday and Saturday there were often many people waiting until 10 a.m. to get a no-show permit. Permit issuing offices normally open between 6 a.m. and 7:30 a.m.; very few of the permits that were put in the pickup box the previous night and which were not picked up by the time the office opened were claimed by 10 a.m. Almost everyone that started their trip picked up their permit when the office or station was closed. This forced the first-come user who depended on no-shows to wait until 10 a.m., resulting in a late

start on the trail. The Forest recorded many complaints about not issuing no-shows earlier.

In 1983, no-shows will be reissued at 8 a.m. So as not to inconvenience the people with reserved permits, they will be asked to notify us if they want their permit held past 8 a.m. This change will benefit many of the first-come users and not discriminate against those not able to pickup their permit by 8 a.m.

G. Organized Groups

With the advent of quotas in 1973, the Forest became concerned about the impact of organized groups on the availability of permits. Groups such as the Boy Scouts, Y.M.C.A., and Sierra Club are well organized and often plan well in advance of their trip. The possibility existed that organized groups, because of their size and advance preparation, could reserve the entire quota on popular days such as Friday and Saturday. It was felt that some portion of a quota each day should be available to the non-organized user; no particular user should be able to have an unfair advantage over others.

Analysis of permit data from 1971 and 1972 on the Mt. Whitney district indicated that organized groups tended to prefer the more popular trails. To prevent organized groups from reserving all the quota (at that time 100 percent of each quota could be reserved in advance), they were limited to reserving no more than one-third of each quota on the more popular trails. Contact was made with the various organizations at that time to explain the reasoning, and their concurrence was secured. As more trailheads came under a quota system, this one-third rule was extended to include those trailheads. When the Minarets Wilderness Management Plan was approved in 1979, it included direction that no more than one-third of each trailhead quota could be reserved by groups of ten or larger.

In 1980 and 1981, the Forest started receiving complaints from organized groups regarding difficulty in obtaining a permit, primarily because of the one-third rule and the small quotas on some trailheads. In discussing this situation with the ranger districts, it was found that the "one-third" rule was being interpreted differently. For the 1982 season, the Forest adopted a policy of working with organized groups that had difficulty fitting their group size into a particular trailhead quota. Within reason, the districts could borrow vacancies from days adjacent to the planned date of departure. At times this resulted in oversubscribing a quota for a day, but the oversubscription was offset by a comparable reduction on adjacent days. The net effect was a balance of use over time. It was a compromise to both the user and the wilderness.

Another recent complaint from some commercial organized groups is that the March 1 starting date for taking reservations is too late. Some groups make plans earlier and advertise trips prior to March 1 without knowing if they will be able to secure a reservation. One solution to this problem would be to allow all organized groups to reserve at an earlier date. In essence, this gives a competitive advantage to organized groups over the non-organized user. Under the present system, all users compete at the same time for available space. In order for the non-organized user to compete, applicants could "pad" their party size so as to secure an "organized" reservation, arriving on the day of the trip with a substantial number of "no-shows". Organized groups would undoubtedly request the more popular weekend days, further straining the system to accommodate demand.

A variation of the above might permit organized groups to apply in advance for reservations only on less popular days and/or less popular trailheads. This could help spread use over the entire wilderness. Another solution might be to allocate a portion of each quota to organized groups to help insure the availability of reserved space. The non-organized user would probably still claim

that the organized group would be receiving a preference out of proportion to their use. It is very difficult to design a system that is fair to each user segment, meets their individual needs, and meets the needs of the wilderness resource. It seems that any system of management has its loopholes, and the astute users do not seem to have any difficulty finding them. Giving a preference to one user group over another seems inherently unfair - it would be hard to defend.

Perhaps the real problem for the organized groups lies with the small quotas and the one-third rule which limits group reservations. There are 44 trailheads on the Forest with quotas. The maximum group size is 25 by Regional Order. The largest quota is 55, and using the one-third rule, the largest group that could be accommodated would be 18. Since an organized group has been defined as containing ten or more people, a quota would have to be at least 30 to accommodate the smallest group. There are only 23 trailheads capable of accommodating this minimum sized organized group. Almost one half of the trailheads with quotas will not accommodate any organized group. Not only does this exclude a large portion of wilderness from group use, but it also concentrates group use on those few trails with quotas large enough to accommodate them using the one-third rule or guideline. In order to accommodate a group of 25, considerable "borrowing" from adjacent days would be necessary. This subject will be discussed in the summary and an alternative proposed to solve this problem.

H. Permit Enforcement

Direction from the Region in 1971 was to make the permit available to the public and to get them used to the idea that a permit was required for entry into wilderness. Enforcement in those first few years consisted of asking to see the permit followed by issuance of a permit for those parties without one. Permits were even issued in the wilderness. With the advent of quotas on selected trails in 1973, a different approach was indicated. Violators (i.e. those

parties without a permit) were issued a Notice of Violation (warning) which served as a permit for the remainder of the trip. They were asked to get a permit prior to their next trip.

In the early years of the permit requirement, compliance averaged about 50 percent. After quotas were initiated, compliance ranged as high as 80 percent on quota trails. As more trails were added to the quota system, compliance increased. The management philosophy adopted by the interagency wilderness managers group for law enforcement was the non game warden approach. Wilderness rangers would take the minimum action necessary to prevent a repeat violation. Each violation was handled on a case-by-case basis, and very few citations were written for no wilderness permit.

A further tightening of permit enforcement occurred in 1975. Parties found without a permit were issued a Notice of Violation and told that it would be kept on file and a second or repeat violation would result in a citation being issued. In subsequent years, no repeat offenders were identified. Either the system worked, or repeat offenders were not caught. In 1975, human waste disposal became a problem on the Mt. Whitney Trail. In order to try and secure better compliance with the quotas on this trail, the Forest tried a more stringent permit enforcement policy. Parties without a permit were asked to return and obtain a permit or receive a citation. More often than not, violators opted for the citation and continued their trip, perhaps feeling that a $25 fine was a "reasonable" price to pay. They essentially bought their way into the wilderness.

Many of our field people were becoming increasingly disturbed by management's apparent "soft line" approach to permit enforcement. At the 1979 wilderness ranger training session, the group asked for a reevaluation of the permit enforcement policy. Line considered the request and the Forest Supervisor's policy recognized two situations: Areas served by trailheads with quotas and those accessed by trailheads without quotas. For trails without quotas,

the existing policy of a written warning with a citation for a second offense was retained. On trails with quotas, the violator(s) would be issued a verbal warning and asked to return and obtain a permit. No attempt would be made to force the violator to leave. However, if the wilderness ranger came upon the same party later in the day or week and the party had not obtained a permit, a citation would be issued. As with the situation on the Mt. Whitney Trail, many violators would ask the dollar amount of the fine and opt for the citation as the "price" to be paid to take the trip on their terms. Making the citation a mandatory appearance versus a set bail usually convinced the violator to obtain a permit on his next trip.

Compliance with the permit requirement now averages 95 percent or better in most areas where a quota is in effect. It seems only fair to the user who complied with the permit requirement that our enforcement should protect that user's opportunity for a wilderness experience. If enforcement is so lax that many users ignore the permit requirement, the resulting overcrowding infringes on the right of the law-abiding user to an opportunity for solitude and a quality wilderness experience.

It is interesting to note that when a wilderness ranger writes a few citations for not having a wilderness permit, word travels fast via the "grapevine". When the "word gets out" that citations are being issued for no wilderness permit, compliance with the permit requirement increases significantly.

I. Commercial Packer Use

In the earlier years of permit administration, attempts were made to record the packer's trips in the reserved total. However, when quotas filled, any parties booked by a packer were allowed to go as an

"override", an unfortunate choice of words. To nobody's surprise, the packers carefully advertised their situation, i.e. if people had trouble getting a permit, they could always go with a packer as an "override".

The Forest was successful in persuading the packers to eliminate the word "override" from their vocabulary. The word "override" implies special treatment and overuse of the wilderness to many people.

The Forest recognized the special status of a packer, who has permanent facilities on National Forest land under TERM permit. Most of the pack stations were in operation before the wilderness areas were established, and many of the trails were built by packers. These permittees are authorized to provide a needed service to the public and to make a decent living. Putting a lid on the amount of business they can do is not easy. But the Forest needed to manage their use within established capacities.

In 1982 each district determined the average daily use each pack station generated over certain trailheads. This average daily packer use was subtracted from the quotas. This put the packer's use <u>within</u> the quota by dealing with averages. Some days their use would be over the aveage and on other days no packer use would enter the wilderness. On days when the packers considerably exceeded the quota, the Forest asked them to be very selective about camp location to minimize conflicts with other users. The impact of commercial packer use is handled in the annual operating plan which is submitted by the packer for Forest Service approval. If packer use increases, other methods of managing this use may have to be considered, including putting a ceiling on the number of parties allowed to enter within a certain time period.

IV. VISITOR PERMIT DATA ANALYSIS - 1982

An important part of capacity management where use is limited or restricted, is understanding how the permit system is used by the public.

The Visitor's Permit contains information which, when aggregated, can help the wilderness manager provide a quality experience for users.

The Fort Collins Computer Center can produce outputs from the VIPER program that are valuable to management. All that is needed is a data base consisting of information on the Visitor's Permit form.

A. Subjects

For this analysis, the subjects are the wilderness users on the Mammoth, White Mountain, and Mt. Whitney ranger districts. The Mammoth district accesses the most heavily used portion of the Minarets Wilderness and the north portion of the John Muir Wilderness. The White Mountain district manages trailheads in the central portion of the John Muir Wilderness. The Mt. Whitney district accesses the southern portion of the John Muir and the Golden Trout Wildernesses. It was felt that data from any three of these districts would be representative of wilderness use on the Forest, and that conclusions could be applied to the Forest as a whole. Over 80 percent of the users on these districts come from southern California. The areas used by the subjects are similar. Weather patterns do not differ significantly from one area to another. It is reasonable to assume that conclusions drawn from one district or another would be applicable to the Forest for the month of August. A further refinement in the population base was made to include only selected trailheads that are under a quota, since the analysis deals with response to limiting use.

B. Instrumentation and Data Collection

The instrument used to record the data was the Visitor's Permit form, FS 2300-30, a copy of which is in the appendix. Data collection was consistent between units. Permits were issued using standards applicable to all units. Personnel taking reservations and recording data (i.e. issuing permits) were trained in the process.

In addition to filling out the permit form, personnel were asked to record reservations and manage the quotas. A reservation ledger was used to manage quotas, a facsimile of which is shown in the appendix. The policy for management of these quotas allowed some flexibility in determining how much quotas could be exceeded. Decisions were made on a case-by-case basis, so that some small deviations from established quotas could be expected.

The data base consisted of permits and reservations for high use/demand trails on the Mammoth and Mt. Whitney districts and low use/demand trails on the Mammoth district. Trailheads included in the high use data base included the following: Minarets Wilderness - Shadow Lake, River, High, John Muir, and Minaret Lakes; John Muir Wilderness - Duck Pass, Kearsarge Pass, Cottonwood Lakes, and Cottonwood Pass. Trailheads included in the low use data base in the Minarets Wilderness were Red Cones, Deer Lakes, Fish Creek, Beck Lakes, and Fern Lake.

C. Treatment of Data

Variables such as snow conditions often affect user's plans. The winter of 1981-1982 resulted in a large snowpack. Cool temperatures resulted in snow remaining longer than normal in the spring and delaying runoff. When this was combined with a healthy mosquito population, the result was non-representative conditions early in the summer season. Use in June is typically unpredictable due to snow, so that June data was excluded from consideration. In 1982, use in the month of July was also affected by snow and high runoff and July data was not used.

Zone carrying capacities and trailhead quotas are based on the wilderness being mostly available for use. August is the best representative month, and also the month in which peak demand occurs. For the aforementioned reasons, only data from the month of August was analyzed. August weather patterns may cause some small fluctuations in use patterns, but these fluctuations are considered normal.

Rather than analyze the data after each section, analysis will occur after all the data has been presented. This will permit a better discussion and understanding of the relationships between no-shows, reservations, and first-come users.

1. Organized Groups

The White Mountain district collected some data on organized group use that is worth noting. In August there were 6,067 people with reservations. Out of these, 2,084 or 34 percent were in groups of ten or more. Since reservation vacancies apply to only one-half the quota, organized group use of the wilderness in August amounted to 17 percent (0.5 x 0.34) of August's available capacity. If the quotas were not constantly filled, group use would amount to more than 17 percent of the total wilderness use for August.

Another statistic worth noting is that the 2,084 people were in 164 groups, giving an average group size of 12.7 people (2,084/164).

2. No-Shows

No-shows are the people who make a reservation and then fail to honor it. They occur in two ways: An entire party may fail to show-up or individuals in a party may cancel. Most of the no-shows recorded for 1982 were entire parties failing to show-up. Almost all of the reserved permits were pickup up after hours in the self-service pickup box. Users were not asked to validate their party size when picking up their permit, so that any overbooking would not be reflected in the no-show figures.

Table 1 - August No-Shows, 1982

Ranger District	Reservations/People	No-Shows	% No-Shows
White Mountain	5,329	1,630	31%
Mt. Whitney	4,684	1,373	29%

3. Demand for Reservations

Both Mammoth and Mt. Whitney Districts felt there was a difference in demand for reservations between popular and less popular trails. To quantify this assumption, trails were segregated into these two categories and data recorded for the month of August as follows:

Table 2 - August Reservations (People)

Trailhead	Reserved Capacity	Reserved Spaces Filled 6/15	Reserved Spaces Filled on Day of Trip
Kearsarge Pass (H)	1,085	1,071	1,154
Cottonwood Lakes (H)	1,085	832	1,165
Cottonwood Pass (H)	620	346	600
Duck Pass (H)	620	541	566
Shadow Lake et al.* (H)	1,860	1,572	1,698
Totals	5,270	4,362	5,183
Red Cones, et al.** (L)	1,860	330	497

* Also includes River, High, John Muir, and Minaret Trailheads

** Also includes Deer Lakes, Fish Creek, Beck Lakes, and Fern Lake Trailheads.

H - High Use Trail (Popular)
L - Low Use Trail (Less Popular)

Demand for reservations can be calculated by comparing the number of reservations made to the total number available. The following percentages are indicative of demand for reservations for August trips:

Table 3 - August Reservation Demand

Trailheads	Reserved Capacity-A	Reservations Filled by 6/15-B	Filled by Trip Day-C	Reservation Demand on 6/15 B/A	Reservation Demand on Trip Day C/A
High Use	5,270	4,362	5,183	83%	98%
Low Use	1,860	330	497	18%	27%

It is also interesting to note how reservation demand varies by the day of the week, both for high use and low use trails. The following tables and figures quantify this demand:

Table 4 - August Reservation Demand By Day of Week - High Use Trails

Day of Week	Reserved Capacity - A	Reservations Filled on Day of Trip - B	Demand on Day of Trip B/A
Sunday	850	816	95%
Monday	850	879	103%
Tuesday	850	757	89%
Wednesday	680	610	90%
Thursday	680	645	95%
Friday	680	696	102%
Saturday	680	780	115%

Figure 5 - August Reservation Demand - High Use Trails

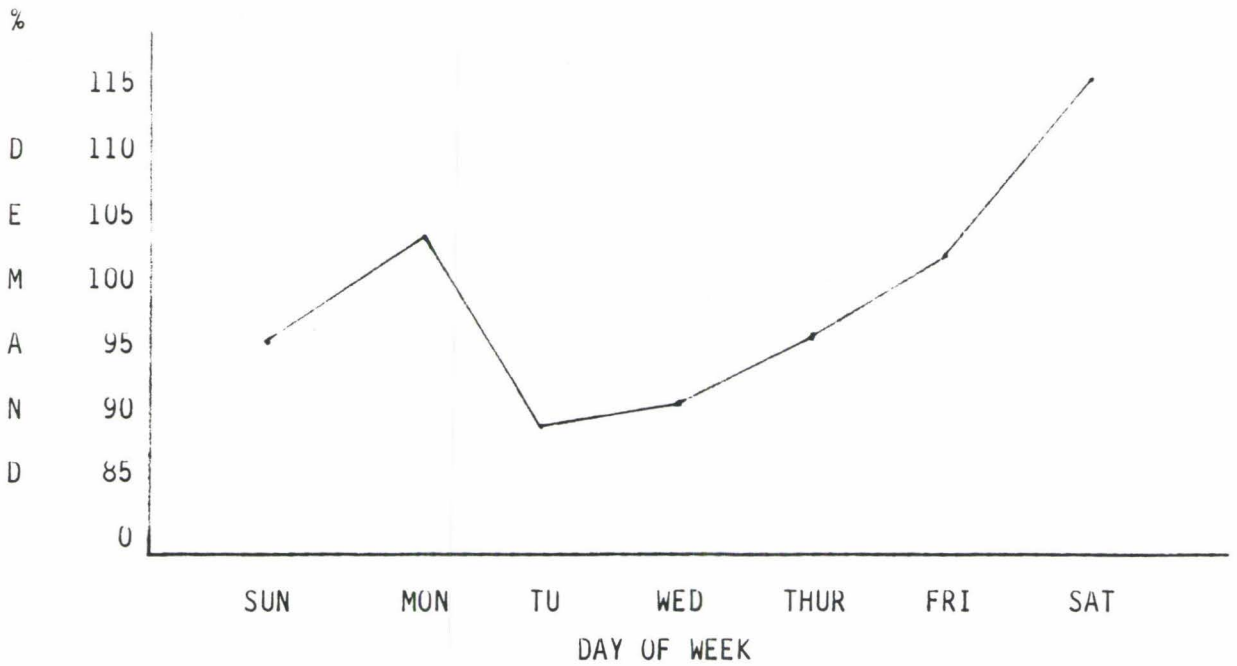
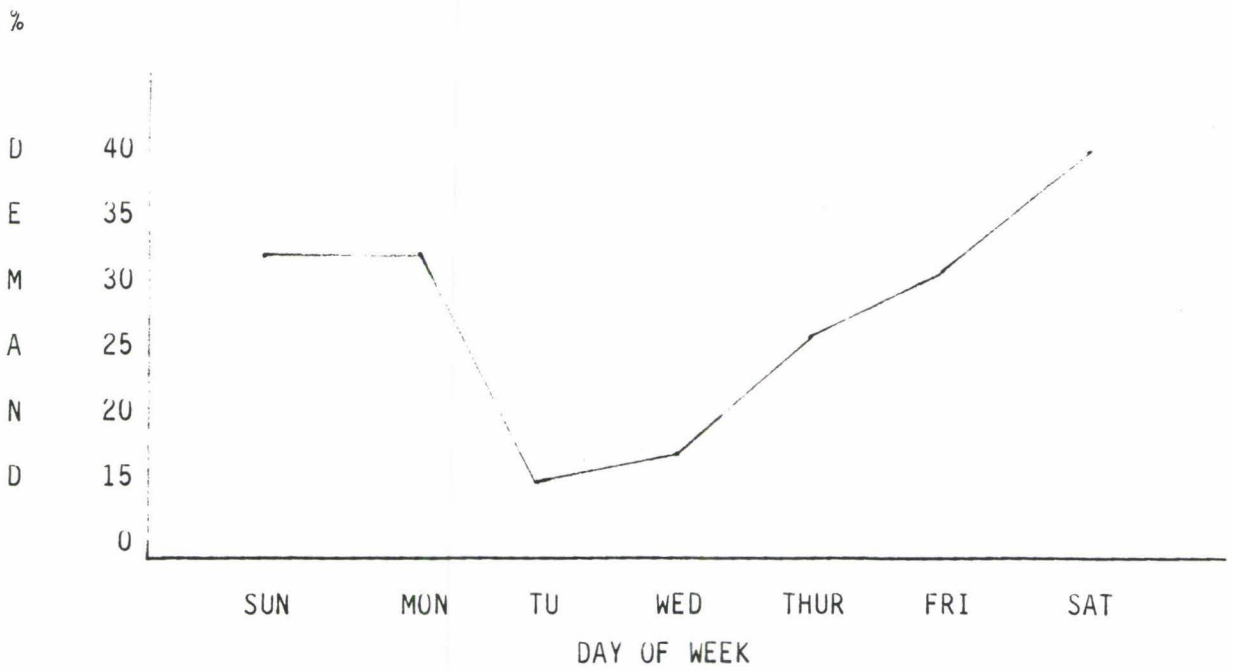


Table 5 - August Reservation Demand - Low Use Trails

Day of Week	Reserved Capacity - A	Reservations Filled On Day of Trip - B	Demand on Day of Trip B/A
Sunday	300	97	32%
Monday	300	96	32%
Tuesday	300	42	14%
Wednesday	240	39	16%
Thursday	240	63	26%
Friday	240	69	29%
Saturday	240	91	38%

Figure 6 - August Reservation Demand - Low Use Trails



4. Demand For First-Come Permits

Since trailhead quotas are split into a portion that can be reserved and a portion for first-come users, it is important to assess not only the demand of the public for reserved permits, but also the demand for first-come permits. If the demand for first-come permits is underestimated and there are insufficient first-come openings available each day, the public may not only be disappointed but also have incurred a significant expense without satisfaction. At some point, there is a balance between the percent of the quota set aside for reservation and that set aside for first-come.

The same methodology is used for first-come permit analysis that was used for the reserved permit analysis. As with reserved permits, trailheads were grouped into high use (popular) and low use (less popular) categories. Data for the month of August is as follows:

Table 6 - August First-Come Permits (People)

Trailhead	First-Come Capacity	First-Come Spaces Filled on Day of Trip*
Kearsarge Pass (H)	775	946
Cottonwood Lakes (H)	775	728
Cottonwood Pass (H)	620	251
Duck Pass (H)	620	501
Shadow Lake et al. (H)	1,550	1,294
Totals	4,340	3,720
Red Cones et al. (L)	1,395	649

(H) = High Use Trail (Popular)
(L) = Low Use Trail (Less Popular)

* No-shows issued are included, which can result in first-come spaces filled being greater than capacity.

Demand for first-come permits can be expressed in a manner similar to that for reservations by comparing the number of people on first-come permits to the total number (capacity) of first-come slots available. The following percentages are indicative of demand for first-come permits for trips starting in August:

Table 7 - August First-Come Permit Demand

Trailheads	First-Come Capacity - A	First-Come Openings Filled - B	Demand for First-Come Openings B/A
High Use	4,340	3,720	86%
Low Use	1,395	649	46%

As with reserved permits, it is interesting to note how demand for first-come permits varies by the day of the week. The following table quantifies this demand:

Table 8 - August First-Come Permit Demand By Day of Week - High Use Trails

Day of Week	First-Come Capacity - A	First-Come Openings Filled - B*	Demand for First-Come Permits B/A
Sunday	700	648	93%
Monday	700	578	83%
Tuesday	700	534	76%
Wednesday	560	302	54%
Thursday	560	478	85%
Friday	560	650	116%
Saturday	560	530	95%

* No-shows issued are included which can result in openings filled being greater than those available.

Figure 7 - August First-come Permit Demand - High Use Trails

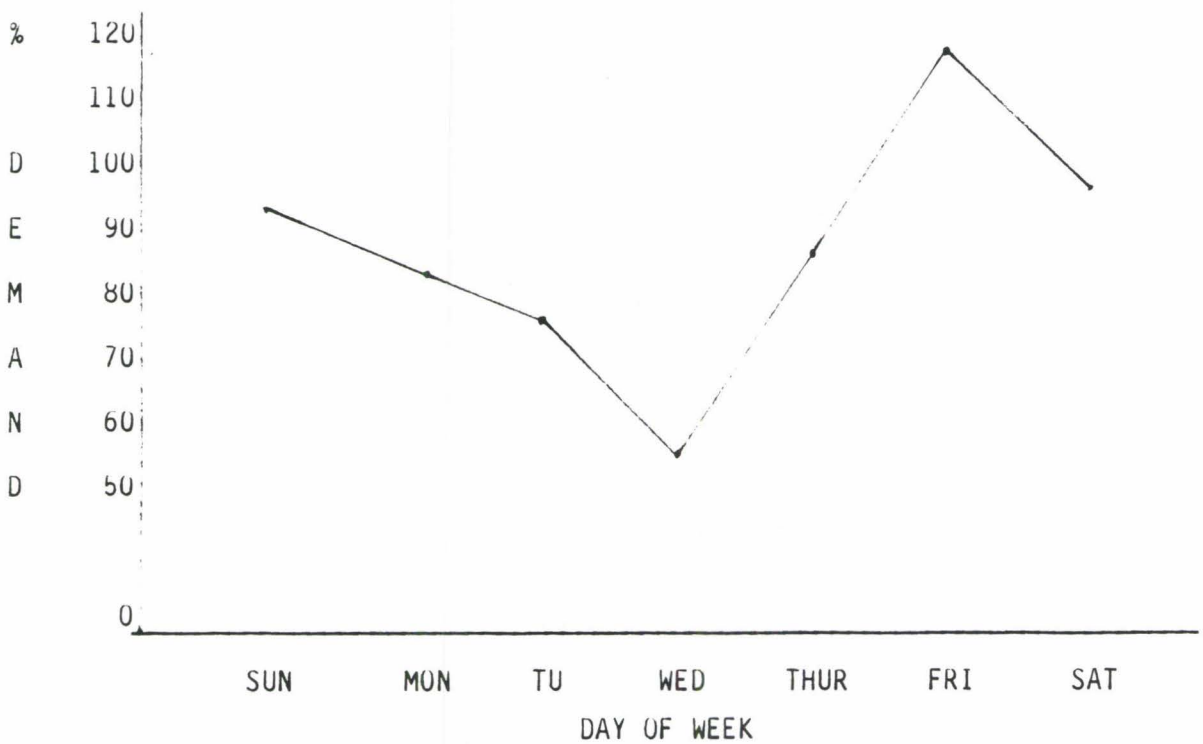
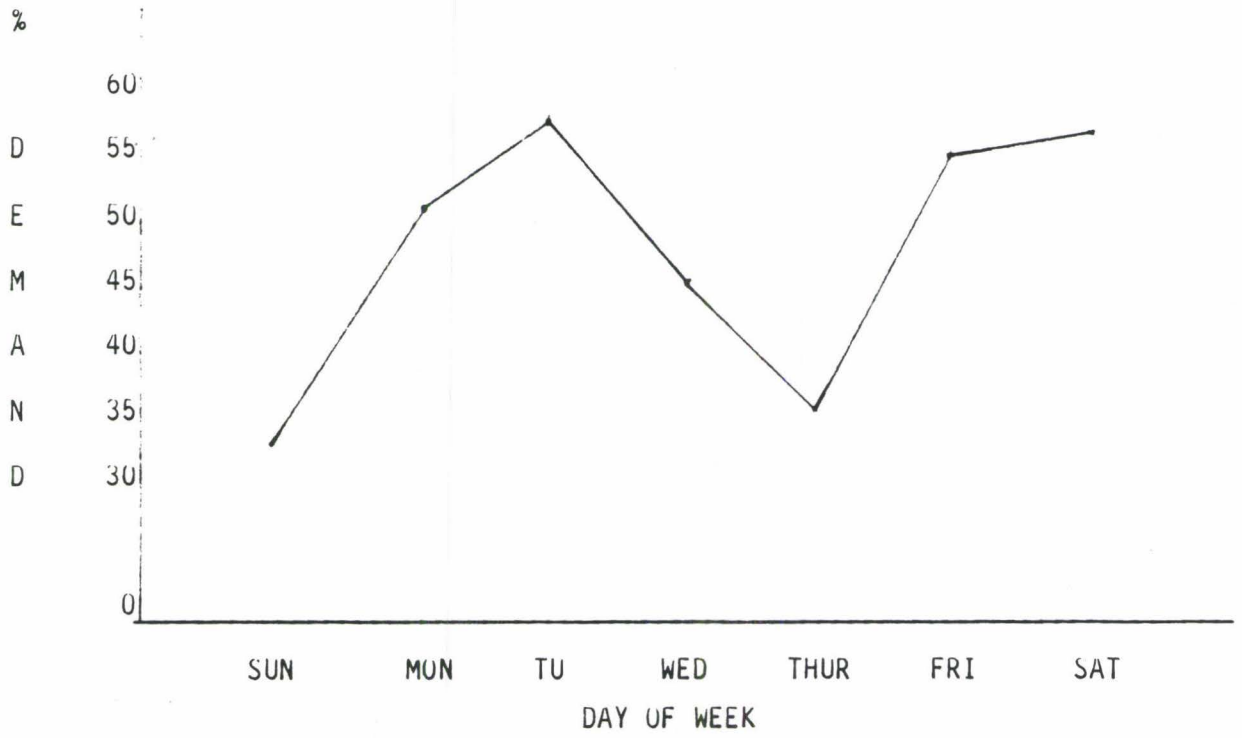


Table 9 - August First-Come Permit Demand By Day of Week - Low Use Trails

Day of Week	First-Come Capacity - A	First-Come Openings Filled-B*	Demand for First-Come Permits B/A
Sunday	225	74	33%
Monday	225	113	50%
Tuesday	225	127	56%
Wednesday	180	79	44%
Thursday	180	62	34%
Friday	180	96	53%
Saturday	180	98	54%

Figure 8 - August First-come Permit Demand - Low Use Trails



5. Discussion

Under present administrative procedures, one half of each quota is allocated for reservation and the other half is made available for first-come users on the day of the trip. However, with about a 30 percent average no-show rate on reserved permits, the percent of each quota that actually becomes available to the public for first-come issuance is 50 percent plus 30 percent of the reserved portion (.30 x .50 = 15%) or 65 percent. In reality only 35 percent of the quota is used by reservation. Any management system that limits use and provides for reservations must take into account no-shows.

In looking at the demand for reservations, it is apparent that on popular trails almost the entire reserved portion (98%) is spoken for by the day of the trip, whereas on less popular trails only 27 percent of the available reservations were taken (Table 3).

Demand for reservations is highest on Friday and Saturday, often exceeding the portion of the quota allocated to reservations. This reflects the "borrowing" of vacancies from adjacent days to accommodate groups, most of which desire to start their trips on weekends. As long as the typical work week is Monday through Friday and vacations start on a weekend, there most likely will be a greater demand for permits on Friday and Saturday. However, the lowest days (Tuesday and Wednesday) are only about ten percent under the reservation capacity for the popular trails (Table 4). This shows that people are willing to start their trip in the middle of the week if they can secure a reservation on a popular trail.

Reservations for low use or less popular trails average less than one third (27%) of the reserved capacity. Variation in demand by day of the week roughly parallels that for popular trails. It is possible that some reservations for less popular trails are made only after the popular trailhead quotas are full. It appears that it is more important to most of the public to take their trip on a popular trail starting midweek than it is to start on a weekend on a less popular trail

(Figures 5 and 6). Management opportunity to depopularize a trail is limited. Education efforts can focus attention on lesser used trails in the hopes of increasing their use at the expense of popular trails. Table 3 compares the demand for reservations on June 15 with the demand on the day of the trip. June 15 is the date when most of the trailhead quotas go into effect. The Forest's policy is to take reservations through the entire season. The additional demand for reservation space on high use trails after June 15 is 15 percent (98% - 83%). For low use trails only an additional nine percent of the reserved capacity is allocated after June 15. Most of the users have made their reservation by June 15, after which their chances of securing a reservation on a popular trail are markedly less. If the Forest were to have a cut-off date of June 15 for reservations, the impact on the public would not appear to be significant. However, a cut off date could reduce administrative procedures and result in savings to the Forest Service. Yosemite National Park has always cut-off reservations at the end of May.

Before discussing first-come demand, it may be helpful to review the reasoning behind restricting use via trailhead quotas. Quotas are directly related to interior capacity (optimum occupied campsites) and length of stay. Quotas are set at a level that will permit the same number of overnight visitors to enter the trailhead <u>each</u> day and still meet the management criteria set for the zone(s) or wilderness. Any use below the quota will add to or increase the wilderness experience available to the visitor. Conversely, continued use above the quota can detract from a wilderness experience and produce unacceptable changes in both the biophysical and social environments.

An important point to keep in mind is that quotas were initiated because demand exceeded supply and unacceptable impacts and change were occurring within the wilderness. It seems only reasonable that administration of the permit system should not inadvertently undersubscribe the quotas because of some built-in inequities. Every effort should be made by management to insure that the public has the opportunity to visit the wilderness. But at the same time, management must preserve

those qualities that are so desired by the public and that are characteristic of wilderness.

Demand for first-come permits does not quite equal that for reservation permits for popular trails (86% vs. 98%). However, on less popular trails demand for first-come permits is almost double that for reservations (46% vs. 27%). This could be due to the fact that when first-come users have arrived at the issuing point and popular trails are full, the alternative is to use less popular trails. A user receiving his application back marked "full" may opt not to take the trip or he may try for a popular trail in another area. That choice may be limited for the first-come user. Hundreds of people are turned down on their application because their choice of trailhead is full. Even through each trailhead has 50 percent of its quota available on the day of the trip, many people do not want to risk taking a trip without a reservation.

Not surprisingly, the popularity of certain days of the week for first-come users roughly parallels that of reserved permit users. Some people will secure a reservation for a less popular trail, but when picking up their permit will ask if space is available on their first choice.

On popular days, reservations made often exceed the quantity available. When this occurs, management has relied on a combination of no-shows and reduced demand for first-come permits, which may or may not occur. In addition, small portions of the quotas for adjacent days may be "borrowed." This "borrowing" may result in higher numbers entering on one day to be offset by a correspondingly lower number of entries on adjacent days.

The one situation management wants to avoid is having the first-come user drive 250 to 400 miles only to find that all the trailheads are full for that day. The 50 percent split between reserved permits and first-come users along with an average 30 percent no-show factor appears to be avoiding that situation. If the no-show rate decreases

and/or the first-come demand increases, there are still vacancies on the less popular trails to accommodate that demand.

V. SUMMARY AND RECOMMENDATIONS

In 1971, the Inyo National Forest instituted a permit system for entry into wilderness. As demand for use increased beyond wilderness capacities, it was necessary to limit use. Sequoia, Kings Canyon and Yosemite National Parks joined the Inyo in developing a management philosophy of restricting use through exterior trailhead quotas in order to retain as much user freedom as possible within the wilderness. Entry quotas were phased-in on a case-by-case basis, and were adjusted based on the recommendations of wilderness managers and documented capacity studies.

Management of the permit system increased in importance as more trails were added to the quota system. Restricted seasons when quotas were in effect were broadened to include any period when demand for use exceeded capacity. The ability to reserve a permit in advance was important to the user, the majority of which originated from southern California. A postmark date of March 1 was set to accept applications for reserved permits. A lottery system was used to process applications according to postmark until the backlog of applications was eliminated. Eliminating telephone applications increased service to the public and removed a bias favoring the telephone over mail applicants. Requiring personal pick up of permits allowed no-shows to be reissued. Night boxes for after hours pick up of permits enabled the Forest to maintain more normal operating hours while also better serving the public.

A non-game warden approach to law enforcement in the wilderness has proved effective and been supported by the public. A gradual tightening of permit enforcement over several years pursuaded the public to obtain a permit and prevented a backlash that could have seriously threatened the existence of the entire permit system on the Forest. Adopting the management philosophy of using the minimum action necessary to prevent a repeat violation was accepted not only by the public, but also by wilderness rangers charged with enforcing the regulations.

The following recommendations are presented to continue or improve administration of the permit system for rationing use on the Inyo National Forest:

A. Reservation Cut-Off Date

Only an additional 12 percent of trailhead quotas are able to be reserved after July 15 under the present policy of accepting reservation applications during the entire season. On the surface this does not appear to be a significant workload. However, for every reservation filled there are two other requests that cannot be accommodated and which necessitate replies.

An alternative for reducing costs and staff would be to accept reservation applications only through May 31 or June 15. A precedent has already been set by Yosemite National Park in that the Park has always ceased taking reservations on May 31. A June 15 date would coincide with the start of the restricted period for most trailheads on the Forest.

B. Converting Entry Quotas From People to Permits

In the discussion of organized groups in Chapter III, it was pointed out that almost one-half of the trailheads with quotas will not accommodate the minimum sized organized group of ten persons. This exclusion results from the one-third guideline that limits organized groups to no more than one-third of a trailhead quota. The intent of the guideline was to protect the small, non-organized user(s) so that a portion of each trailhead quota would be available for reservation. These guidelines functioned satisfactorily when quotas were large and the one-third rule did not apply to all trailhead quotas.

When the one-third rule was formally approved in the Minarets Wilderness Management Plan, problems started to appear as this guideline was applied Forest-wide. Original estimates of trailhead quotas were generally revised downward as the data base on campsite inventories was completed. SKNP, based on backcountry ranger's observations, asked the

Forest to lower some quotas. The Minarets Wilderness Management Plan approved quotas as small as ten. The cumulative result of the one-third rule and smaller quotas made it harder for organized groups to reserve a permit.

An alternative which the Forest can consider to remedy this situation is to convert trailhead quotas from people to permits. Administrative procedures would essentially stay the same. Management could convert quotas from people to permits based on the average group size for either an entire wilderness or for a particular trailhead (this information is available from the VIPER computer outputs). If the average group size is divided into each trailhead quota, quotas can be converted to the number of permits that would be available each day for each trailhead.

Management would have to look at each area accessed by a trailhead(s) and determine the ability of those areas to accommodate organized group use. In areas that have large capacities and quotas, the number of permits available to organized groups might be one or two per day with only a 25 person limit on party size (Regional Order). In other areas with lower capacities and smaller quotas, perhaps only one permit per day would be available, and in some instances there might be a maximum size limit placed on the group, e.g. 15 instead of 25. In the few cases where present quotas are as low as ten, a further restriction might be imposed that would allow only one organized group in a drainage at one time. This could be calculated from the average length of stay, i.e. if the average length of stay was two nights, a group could enter every third day. Group reservations would not be guaranteed since non-organized groups could reserve all the permits available before an application was received from an organized group. In addition to providing for a possible group entry every three days, the other permits would be available each day for requests from party sizes less than ten.

In order to help disperse use to less popular areas and to encourage starting trips on less popular days, the Forest could accept applica-

tions earlier from organized groups for less popular days and areas. Data analysis in the previous chapter pointed out the differences in demand for reservations between trailheads and days of the week.

There are two main factors which management must consider. The first is that maximum use in terms of people entering per day per trailhead can vary above and below the old quota based on people. However, if the average party size does not change, maximum use should stay the same when averaged out over a period of time. Management (and the wilderness resource) must be able to accept this variation. The second factor concerns the possibility that the average size of organized groups could increase within the 25 person maximum. The average group size in August in 1982 on the White Mountain district was 12.7 people. If field observation reveals unacceptable changes due to increased size of organized groups, a reduced maximum group size could be applied to affected trailheads.

This recommendation to convert use limitations from trailhead quotas based on people to quotas based on permits is founded on the following:

1. Organized groups represent only a small percentage of permits. VIPER data from 1976 shows that organized groups of ten or more amounted to 7.1 percent of all the permits written for the John Muir Wilderness. Data from 1980 shows that organized groups of ten or more amounted to 7.0 percent of all permits written for the John Muir Wilderness. However, if the data from the White Mountain district is an indication that group use is increasing, that could explain part of the present difficulty in dealing with this user segment (August organized groups amounted to 17 percent of total permits). If organized groups were allowed to reserve earlier than March 1 for less popular days and trailheads, the resulting dispersal would actually improve the opportunity for a quality wilderness experience for all users.

2. Wilderness capacity is based, in part, on campsites. Theoretically, each party only occupies one campsite and quotas based on per-

mits relates directly to campsites. An increased effort in working with organized groups can influence their behavior and campsite selection. This would lessen the impact of groups on other users and on the biophysical resource.

3. All trailheads would be open to use by groups. This would eliminate the present concentration of group use on approximately one-half the trailheads. It would also make the entire wilderness accessible to all users-something that just seems like the "right" thing to do.

4. Managing trailhead quotas on a permit basis would "make life easier" at the front desk. The justification for recommending this change cannot be made just for administrative reasons. However, the benefits should not be overlooked. The present system requires the manager to borrow vacancies, within reason, from adjacent days. Many of the seasonal hires or volunteers are uncomfortable with having to make these type of decisions, and management spends an inordinate amount of time supervising quota administration. Quotas based on permits are more "cut and dry" and therefore easier to administer.

5. Other wilderness areas where use is limited have quotas based on permits (Stankey, 1979), and those systems have worked well. The Inyo could change to quotas based on permits, and adjacent units could continue their present system without conflicts. The non-organized user should not be affected by this change. However, the organized group users would have the opportunity to have access to all trailheads ... an opportunity which is presently not available.

C. Integrating Commercial Outfitter/Guide Use Into Capacity Management

The Inyo has 14 commercial outfitter/guides (O/G) that operate under TERM resort permits with permanent facilities on national forest land. In addition, there is one other packer permittee with an O/G permit without facilities on national forest land. These permittees are

authorized to provide a needed public service and to make a reasonable profit. In return they pay a commensurate fee for the privilege of doing business on national forest land. Because of the foregoing factors, these permittees are in a "category" different from other commercial and non-commercial users, but their impact on the wilderness resource must still be taken into account.

The proposed revision of the O/G policy requires that the special use permit list the authorized service days. In line with this proposed policy, it is recommended that the following be continued or enacted:

1. The average daily packer use (people or parties/permits) would be subtracted from trailhead quotas, with the balance available to all other users.

2. Other commercial O/G applicants wishing to use wilderness would be required to compete for available permits with the general public.

3. TERM O/G permittees would be allocated permits on a case-by-case basis after their service days were exhausted. Additional permanent allocation of service days for an existing pack permit would depend upon a feasibility study or termination of an adjoining permit.

4. TERM O/G permittees would be required to indicate the type of pack trip on each wilderness permit to facilitate determining the amount of service days consumed (see appendix for example).

5. Each permittee would work with the Forest Service to reach agreement on areas (campsites) which are suitable for stock use and which minimize conflicts with other wilderness users. This agreement would be documented annually in an approved operating plan.

6. No new O/G permits would be issued for packing services on the Forest except through changes in ownership or by prospectus.

D. Ticketron Reservations

As discussed in Chapter III C, administration of the permit reservation system is time-consuming and costly. Elimination of reservations would save money, but it is highly unlikely that such a decision would have the support of the public. The public is aware that requests far exceed the wilderness capacity of certain trailheads. Reservations are a tool to disperse use. Most people just need to know if they can get a "ticket" for their trip. An alternative to the Forest Service making a reservation is to contract this service with an established company, such as Ticketron, in the private sector.

One prerequisite for implementing this alternative would be to convert quotas from people to permits, so that Ticketron or a similar company would not have to operate in the "gray" area. Either a reservation is available or it is not. Undoubtedly there would need to be some sideboards on some trailheads, e.g. only two groups of ten or larger per day or a maximum group size of 15. As previously discussed in section B, these sideboards could be tailored for individual trailheads.

As with campground reservations, a computer printout listing all reservations and which contained all the information necessary to write a wilderness permit would be sent to each district about a week prior to the start of the trip. The maximum number of reservations/permits that would appear on a Ticketron printout for one week would be about 250. These could be entered in one day be a terminal operator into the Forest computer data base to update the trailhead quota status. After each district entered their data into the computer, the print phase of the program would then print all the permits for the weekly period covered. Reserved permits would still need to be picked up personally in order to account for no-shows. First-come permit issuance procedures would remain unchanged. Ticketron would only issue reservations and not permits.

The advantages of this alternative are as follows:

1. The Forest would not be directly involved with permit reservations. Permit administration with quotas would be confined to the restricted period, generally 6/15-9/15.

2. The majority of wilderness users (80%) which live near Ticketron (southern California) outlets would be able to secure a reservation with one contact (visit) to an outlet. The present mail system often results in repeated contacts until a reservation is secured.

3. Additional people to handle permit administration would not be needed until the summer season, thus saving funds that would have been spent on salaries.

4. A charge for a reservation could be handled by Ticketron, with a portion going to Ticketron and the balance to the U.S. Treasury. Districts would not have to handle money, while at the same time a fee could be returned to the government for a reservation service rendered. The Boundary Waters Canoe Area in northern Minnesota has a reservation fee in effect.

Possible disadvantages include:

1. Ticketron personnel would be ill-equipped to answer questions about wilderness travel. However, the public could be referred to the appropriate office for further information.

2. District phone calls and mail requests for information could increase.

3. Inaccurate application information could result in incorrect reservations.

4. After many years of conditioning the public to a reservation "system," changing to Ticketron could be disruptive. Management

would need to be flexible the first season in managing the reservations. A brochure would need to be prepared to inform the public.

5. Over-subscription by Ticketron could lead to overcrowding, social conflicts, and potential resource degradation. However, wilderness capacity is dynamic and changing, unlike a campground where the capacity is fixed.

6. At present, there is no charge system approved by Congress for wilderness permits. Reimbursement for Ticketron's services would need to be clarified.

7. Ticketron campground reservations on the Inyo have created administrative problems in the past. These problems have, to a large extent, negated the advantages of this system. Assurance would be needed that these problems could be overcome.

8. People living outside a Ticketron outlet area (including local residents) would have to write for reservations. This would probably cause some resentment on the part of local residents.

E. Computer Reservations and Printing of Permits

Computer reservations and storage of permit data should continue. Upon successful testing of the computer program on the White Mountain and Mono Lake Ranger Districts, it should be expanded to include all districts. If reservations are handled by the private sector, the status of trailhead quotas would be updated weekly upon entering the reservation data from a contractor such as Ticketron. The computer program would continue to print reserved permits and maintain the current status of trailhead quotas in order to serve first-come applicants.

Permit data stored in the computer would be readily available for prepared program outputs (visitor day use, etc.) from the Fort Collins

Computer Center. Having permit data ready for analysis will reduce the present workload of manually calculating visitor use for RIM reporting at the end of September.

F. Behavior Modification and Monitoring

Efforts at educating new and returning wilderness users in the proper methods of wilderness use should continue. Interagency brochures, regulation and minimum impact attachments to permits, and wilderness maps with associated educational text should continue to be developed and made available to the public. Trailhead Wilderness Information Specialists (WIS) also contribute to securing proper behavior on the part of wilderness users. The personal face-to-face contact between the user and agency personnel builds credibility and trust with the user.

Wilderness ranger contacts are an important way to modify or correct inappropriate behavior. A low-key approach to law enforcement has worked well in the past and should continue. The successful approach continues to be using the minimum enforcement action necessary to prevent a recurrence of a violation.

Monitoring resource conditions, both social and biophysical, should continue. Documentation of conditions by wilderness rangers and specialists can be done on existing Code-a-Site inventory forms. Monitoring and recording campsite condition classes is important to detect positive or negative changes in the biophysical resource. Indirect action via changes in trailhead quotas or behavior modification through educational efforts may be sufficient to alleviate resource damage. These indirect methods are preferable to interior regulations which are more direct and site specific. However, actions such as closing areas to camping or wood campfires may be necessary to restore specific sites to acceptable conditions.

REFERENCES

Armstrong, Patrick
1974. Bishop Creek Study. Inyo National Forest.

Bury, Richard L., and C. Ben Fish
1980. Controlling wilderness recreation: What managers think and do. J. Soil and Water Consv. Mar. - Apr.: 90-93.

Frissell, Sidney S.
1978. Judging recreational impacts on wilderness campsites. J. For. 76(8): 481-483.

Hendee, John C., Roger N. Clark, Mack Hogans, Dan Wood, and Russ Koch.
1976. Code-A-Site: A system for inventory of dispersed recreational sites in roaded areas, backcountry, and wilderness. USDA For. Serv. Res. Pap. PNW-209, 33 p. Pac. Northwest For. and Range Exp. Stn., Portland, Oregon.

Lime, David W., and Grace A. Lorence
1973. Improving estimates of wilderness use from mandatory travel permits. USDA For. Serv. Res. Pap. NC-101, 7 p. North Cent. For. Exp. Stn., St. Paul, MN.

Lime, David W., and Roland G. Buchman
1974. Putting wilderness permit information to work. J. For. 72(10): 622-626.

Stankey, George H.
1979. Use rationing in two southern California wildernesses. J. For. 77(5): 347-349.

Van Wagtendonk, Jan W.
1981. The effect of use limits on backcountry visitation trends in Yosemite National Park. Leis. Sci. 4(3): 311-323.

Van Wagtendonk, Jan W., and James M. Benedict 1980. Wilderness permit compliance and validity. J. For. 78(7): 399-401

APPENDIX

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

FORM APPROVED
OMB NO. 40R3687

VISITOR'S PERMIT

WHEN SIGNED, THIS SINGLE - VISIT PERMIT AUTHORIZES

(1) NAME (Print, Middle Initial, and Last)
ERNEST P. DEGRAFF, JR

(2) MAILING ADDRESS (Optional)
467 S. FOWLER

(3) CITY AND STATE
BISHOP, CA

(4) ZIP CODE: 9 3 5 1 4

(5) TO VISIT (and to build campfires in accordance with regulations)
JOHN MUIR WILDERNESS: 0 0 8 7

(6) DATES (Give best estimate if start and finish dates)
From month/day: 0 7 1 2
Through month/day: 0 7 1 4

(7) LOCATION OF ENTRY POINT
KEARSARGE PASS TRAIL: 0 2 8

(8) LOCATION OF EXIT POINT
SAME: 0 2 8

(9) PRIMARY METHOD OF TRAVEL: 0 1

(10) NUMBER OF PEOPLE IN GROUP: 0 5

(11) NUMBER OF PACK AND SADDLE STOCK: 0 0

(12) NUMBER OF WATERCRAFT OR VEHICLES
(Check Regulations - Vehicles not allowed in many permit areas): 0 0

I agree to abide by all laws, rules and regulations which apply to this area and will do my best to see that everyone in our group does likewise.

(13) VISITOR'S SIGNATURE: E P DeGraff Jr.

DATE: 7-12-84

(14) TRAVEL PLAN

List or code all zones to be traversed, in sequence of travel, and number of nights to be spent in each zone.

In areas where specific campsites are assigned, list and code each site and the number of nights assigned.

TRAVEL ZONES (or campsite)	NIGHTS
0 4 3	0
0 6 4	1
0 4 3	1

OPTIONAL

(15)(a) NUMBER OF TIMES YOU VISITED THIS AREA IN PAST 10 YEARS (Enter appropriate code)
[1] NONE [3] TWICE [5] FOUR
[2] ONCE [4] THREE [6] FIVE OR MORE

(15)(b) IS VISITING THIS AREA (Enter appropriate code)
[1] THE PRIMARY PURPOSE OF YOUR TRIP AWAY FROM HOME?
[2] ONE OF SEVERAL IMPORTANT THINGS YOU PLANNED TO DO ON YOUR TRIP?
[3] SOMETHING YOU DECIDED TO DO AFTER ARRIVING NEAR THE AREA?

(16) REMARKS

(17) ISSUING OFFICER'S SIGNATURE: K C Wylie

FOREST CODE: 0 4 OFFICE CODE: 5 4

VISITOR'S PERMIT FORM

VISITORS MUST HAVE THIS PERMIT IN POSSESSION DURING STAY IN REQUIRED PERMIT AREAS

FS 2300-36 (7-79)

RESERVATION LEDGER

TRAIL #14	QUOTA 40	
NORTH LAKE/PIUTE PASS	RESERVE TO 20	
packer use	2	18

TRAIL #15	QUOTA 25	
LAMARCK/WONDER	RESERVE TO 13	
packer use	—	—
Dorothy L. Brown	3	10

TRAIL #16	QUOTA 40	
SABRINA	RESERVE TO 20	
packer use	1	19

TRAIL #17	QUOTA 15	
TYEE/GEORGE	RESERVE TO 8	

TRAIL #18	QUOTA 85	
SOUTH LAKE BISHOP PASS	RESERVE TO 33	
packer use	5	33
LINDA JOSEPH	1½	7
Jay Titus	2	5

TRAIL #318	QUOTA 25	
TREASURE LAKES	RESERVE TO 13	
Jay Parmer	5	3

TRAIL #20	QUOTA 45	
BIG PINE CREEK N. FORK	RESERVE TO 23	
packer use	2	21
Steven White	8	13
Byron Bice	6	7
Charles Webb	9	Ø

TRAIL #21	QUOTA 20	
BIG PINE CREEK N. FORK	RESERVE TO 10	
Harold Cress	8	2

DAY: Saturday DATE: 7/2

RESERVATION CONFIRMATION POSTCARD

TO _____

This is to confirm your wilderness trip reservation for _____ trail for a party of _____ starting _____. Your wilderness permit can be picked up at:

WHITE MOUNTAIN RANGER DISTRICT
798 N. MAIN STREET
BISHOP, CALIFORNIA 93514

THIS IS NOT A WILDERNESS PERMIT. RETAIN THIS CARD AS PROOF OF RESERVATION.

To provide for night pick-up, permits for the following day will be placed in a permit box outside the ranger station at 5 pm.

Your permit will be held only until 8 am of the date of your trip. Any permits not picked up by 8 am will be reissued to other hikers on a first-come first-serve basis. Contact the Forest Service if you are unable to pick up the permit by 8 am and wish the reservation held longer.

Please Note:

WOOD FIRES PROHIBITED WITHIN 300 FEET OF ANY BODY OF WATER WITHIN LITTLE LAKES VALLEY BASIN.

White Mountain Ranger Station: 619-873-4207

OUTFITTER/GUIDE TRIP RECORD

FOR SERVICE DAYS COMPUTATION

DAY RIDE	
SPOT/DUNNAGE-ONE WAY	
SPOT/DUNNAGE-ONE WAY LAYOVER	
SPOT DUNNAGE-TWO WAY	
SPOT DUNNAGE-TWO WAY LAYOVER	
TRAVEL/DUNNAGE TRAVEL	
DUNNAGE CACHE	
DUNNAGE CACHE-LAYOVER	
ALL EXPENSE	
BASE CAMP W/ STOCK	
BURRO	
OTHER	

1983 trail & quota information

White Mountain Ranger District 798 North Main Bishop CA 93514 Telephone: 619-873-4207

All trailheads beginning on the White Mountain Ranger District are subject to quota, meaning only a specified number of hikers may enter the wilderness each day. Approximately one-half of each daily trailhead quota is available for advance reservation with the remainder issued on a first-come first-serve basis on the day of the hike. The quota period is from June 15 through September 15. Many roads, bridges, and trails suffered flood damage last fall. During repairs and reconstruction there may be some temporary reductions in quotas due to lack of parking or access to certain areas.

TRAILHEAD	QUOTA	1983 SPECIAL REGULATIONS AND TRAIL INFORMATION
McGee	40	Access road beyond pack station is partially washed out. Road may be closed. Plan to park below trailhead. Watch for signs. First and second creek crossings are gone. Search for alternatives. Use caution during periods of high water. Sections of trail above may be damaged, but passable to both stock and hikers. Repairs planned in 1983.
Hilton Creek	20	Trailhead located off old Highway #395. Take Tom's Place or McGee Creek exits from present highway.
Hilton Lakes	35	Trailhead located near pack station on the Rock Creek Road. Access road may be closed for flood repair during portions of the summer. Watch for alternate parking areas. Temporary reductions in quota may be required due to lack of parking space.
Little Lakes Valley	55	Wood fires prohibited within 300 feet of water within entire basin. Road construction and bridge repair may close access to trailhead parking. Watch for alternate parking. Temporary reduction in quotas may be required due to lack of parking space.
Mono Pass	30	Wood fires prohibited within 300 feet of water, including Ruby Lake. Campfire restrictions in effect from Little Lakes Valley to Mono Pass. Road construction and bridge repair may close access to trailhead parking. Watch for alternate parking. Temporary reductions in quota may be required due to lack of parking space.
Pine Creek	55	Road bridge near the parking and pack station area is washed out. Reconstruction may necessitate alternate parking areas. Watch for signs. Many rocks and some erosion damage on trail below the Brownstone Mine site. Some log stream crossings are gone, although the one just below Pine Lake has been repaired. Alternate creek crossings can be found, but use caution during periods of high water. Repairs planned during 1983.
Gable Lakes	20	Steep trail with falling rock. No water available for the first 2000 feet of elevation gain. Road bridge near the parking and pack station is washed out. Reconstruction may necessitate alternate parking areas. Watch for signs.
Horton Lakes	25	The 7½ mile drive to trailhead on dirt road is not recommended for low clearance cars. No vehicles beyond closed gate. Trailhead directions available at White Mountain Ranger Station.

TRAILHEAD	•QUOTA•	1983 SPECIAL REGULATIONS AND TRAIL INFORMATION
Piute Pass	40	Wood fires prohibited within 300 feet of Loch Leven and Piute Lakes. No camping within 500 feet of Golden Trout Lake in Humphreys Basin. Access road to North Lake Campground and trailhead destroyed by flood. North Lake Campground closed until further notice. All access will be by foot from the hiker parking lots near the pack station. Repairs planned during 1983.
Lamarck & Wonder Lakes	25	Wood fires prohibited within 300 feet of Lower Lamarck Lake. Access road to trailhead and North Lake campground destroyed by flood. North Lake Campground closed until further notice. All access will be by foot from the hiker parking lots near the pack station. Repairs planned during 1983.
Sabrina Basin	40	Wood fires prohibited within 300 feet of Blue Lake. No overnight parking at trailhead or at Lake Sabrina boat launch area. Use designated parking areas below Sabrina Campground.
Tyee/George	15	Trail obscure over Table Mountain. Very few suitable camping spots at lowest Tyee Lake.
Bishop Pass	55	Wood fires prohibited within 300 feet of water within the canyon from the wilderness boundary to Bishop Pass. Wood fires prohibited in Dusy Basin. Dogs and firearms prohibited beyond the pass.
Treasure Lakes	25	Wood fires not recommended due to lack of suitable firewood. Some flood damage to trails and bridges. Use caution during periods of high water.
Baker Cr.	15	4WD vehicles only via Coyote Ridge entry.
Big Pine No. Fork	45	Wood fires prohibited within 300 feet of First and Second Lakes & 500 feet of Sam Mack Meadow. Access road beyond Glacier Lodge has been destroyed by flood. Park at hiker parking lot below pack station. Use trail originating there. Walk-in camping still available at Second Falls. Short sections of trail gone or damaged between end of old roadhead and Second Lake but passable by hikers. Some damaged sections may pose problems for stock. Repairs planned during 1983.
Big Pine So. Fork	20	Access road beyond Glacier Lodge has been destroyed by flood. Park at trailhead parking lot below pack station. Foot access only from hiker parking lot. First mile of trail destroyed. Hikers will have to make their way through a boulder field and debris until the route leaves the flood plain.
Birch Creek	20	Rough dirt road to trailhead. 4WD vehicles only for last mile. Close stock gate after passing through. Access not available from Tinemaha because of intervening private property with locked gates barring road. Property owner asks that hikers not cross his land. Please respect his property rights. Ask for alternate directional map at White Mountain Ranger Station.
Red Lake	20	Rough dirt road to trailhead; recommended only for trucks or 4WD vehicles. Access not available from Tinemama because of intervening private property with locked gates barring road. Property owner asks that hikers not cross his land. Please respect his property rights. Ask for alternate directional map at the White Mountain Ranger Station.
Taboose	60 week	First creek crossing is washed away. Creek should be crossable during low water. Trail not passable to stock. Sections of trail further up canyon are washed out.

inyo National Forest news

White Mountain Ranger Station
1983 Hiking Season

WILDERNESS PERMIT FACT SHEET

PERMIT REQUIREMENTS: Wilderness permits are required on a year-round basis, even for day hikes. Permits are available at all ranger stations on the Inyo National Forest. During the winter months, self-issuing permits are also available when ranger stations are closed.

APPLICATIONS: Applications for summer hikes will be accepted only by mail or in person. Allow about 2 weeks for applications to be processed. List at least 2 alternate trailheads, and if possible, 2 alternate starting dates.

QUOTAS: All trailheads from Red Lake to McGee Creek area are subject to quota, meaning only a specified number of hikers may enter the wilderness each day during the restricted period. Approximately one-half of each daily trailhead quota will be available for advance reservation with the remainder issued on a first-come, first-served basis on the day of the hike. The quota period will essentially remain June 15 through September 15, inclusive - but the quota period can start earlier or end later, depending on snow conditions, demand, and special circumstances.

RESERVATIONS: March 1st will be the earliest date reservation requests will be accepted. Requests must be postmarked after February 28th. Reservation applications received before March 1st will be returned to sender. All applications are processed in order of receipt with no individual or organized group receiving preferential treatment. A written confirmation of reservation will be mailed to all applicants. This reservation card should be retained as proof of reservation and submitted upon arrival to obtain your wilderness permit. The permit can be picked up at the place indicated on the reservation card.

WILDERNESS PERMIT PICKUP: Wilderness permits are no longer mailed in order to reduce postage costs and better manage the "no-show" factor. An average of 30% of those people issued reservations do not use them, nor is the ranger station notified to cancel so others may travel. To provide a more equitable system, permits must be picked up by 8 am at the place and date stated on the reservation card. Permits not picked up by 8 am will be cancelled and the spaces re-issued on a first-come, first-served basis. Hikers not able to arrive by 8 am must contact the issuing ranger station in order to have the reservation held longer. Hikers must enter the wilderness on the date stated on their wilderness permit. To provide for night time pick-up, permits for the following day will be placed in a permit box outside the ranger station at the close of daily business.

(OVER)

White Mountain Ranger Station 798 North Main Street
Bishop, CA 93514 Telephone: (619) 873-4207

OBTAINING WILDERNESS PERMITS WITHOUT A RESERVATION: Backpackers not able to obtain advance reservations during the quota period are encouraged to take advantage of the first-come, first-served portion of the daily trailhead quota. With the exception of holiday periods, hikers can be accommodated somewhere on an Eastern Sierra trail. It is important to be flexible when considering alternatives.

SNOWPACK PREDICTIONS FOR THE SUMMER OF 1983: The Sierra Nevada has experienced heavy snowfall this season. Depth figures compare with those from the winter of 1981-82. California State Department of Water Resources snow survey teams are predicting that this season's snow depths could exceed last year's. This indicates that the highcountry could be snowbound until mid-July. Last year some passes retained snowpacks throughout the entire summer. Stream crossing were high and in some cases hazardous even into August. We suggest you take these conditions into account when planning your summer backcountry vacation. For early summer hiking trips we recommend that you explore the Golden Trout and Domelands Wilderness Areas which are located in the southern section of the Sierra Nevada.

IMPORTANT REMINDERS BEFORE YOU APPLY:

1. *USE THE ENCLOSED APPLICATION FORM. PRINT LEGIBLY AND INCLUDE AS MUCH INFORMATION AS POSSIBLE.*
2. *LIST AS LEAST TWO ALTERNATE TRAILHEADS, AND IF POSSIBLE, TWO ALTERNATE STARTING DATES. THIS WILL REDUCE DELAY IN PROCESSING APPLICATION REQUESTS. CHANCES OF OBTAINING A RESERVATION ARE GREATER IF PARTY SIZE IS KEPT SMALL AND REQUESTED STARTING DATES ARE OTHER THAN A FRIDAY OR SATURDAY.*
3. *IF YOU ARE AN ORGANIZED GROUP LEADER, BE SURE TO INCLUDE THE SMALLEST GROUP SIZE YOU CAN BRING IN THE EVENT THAT THE TRAILHEAD QUOTA CANNOT ACCOMMODATE YOUR REQUESTED NUMBER OF PEOPLE.*
4. *MARCH 1st WILL BE THE FIRST DAY APPLICATION REQUESTS WILL BE ACCEPTED. REQUESTS MUST BE POSTMARKED AFTER FEBRUARY 28.*

Happy hiking to all,

The Visitor Center Staff
White Mountain Ranger Station

1983 Hiking Season

Wilderness Friend

We are sorry to inform you that there is no space available for your party for the date and trailhead you requested. To aid you in obtaining a reservation we suggest the following when you reapply:

* Request entry days other than Friday or Saturday
* Keep party size small. Smaller groups are easier to accommodate.
* List 2 alternate starting dates and 2 alternate trailheads.
* Apply for trails that are less used. Guide chart on the reverse.

If you are not able to obtain a reservation after your second application, then take advantage of the first-come first-serve portion of the daily quota. Approximately one-half of all trail space is available on this basis each day. In addition, there are usually more permits available after 8 am from those reservations not claimed.

With the exception of holiday periods, hikers without reservations can be accommodated somewhere on an Eastern Sierra trail. Past experience indicates that chances are good of obtaining a permit for first-choice trail if hikers arrive here and apply when offices open in the morning. It is important to be flexible and be willing to accept alternatives.

Listed on the reverse are places to apply for wilderness permits when you arrive in the area. Please feel free to contact us if we can be of further assistance or if additional information is needed regarding the administration of the wilderness permit system. The visitor center staff is available to respond to telephone inquiries for general wilderness information, high country conditions, and trail reports.

Good Luck and Happy Hiking

White Mountain Ranger Station 798 No. Main Bishop CA 93514 619-873-4207

INYO national forest

White Mountain Ranger District trailhead use: By June 15th each year, the heavily used trails are 95% booked and moderately used trails are booked for all weekends with 40% of mid-week space still available. Lightly used trails have ample space except for Holidays.

LIGHTLY USED TRAILS	MODERATELY USED TRAILS	HEAVILY USED TRAILS
Baker Lake	Big Pine Creek, So. Fk.	Big Pine Creek, No. Fk.
Birch Lake	Hilton Lakes	Bishop Pass
Gable Lakes	McGee Canyon	Lamarck Lakes
Hilton Creek	Pine Creek	Little Lakes Valley
Horton Lakes	Treasure Lakes	Mono Pass
Red Lake		Piute Pass
Tamarack Lakes		Sabrina Basin
Tyee-George		

These are the places to obtain wilderness permits on a first-come first-serve basis during the summer hiking season. After September 15th, obtain all permits from the White Mountain Ranger Station.

BISHOP CREEK ENTRANCE STATION
Hwy 168, 10 miles west of Bishop
Permits issued starting at 6 am

Baker Creek
Bishop Pass
Lamarck Lakes
Piute Pass
Sabrina Bsin
Treasure Lakes
Tyee/ George Lakes

ROCK CREEK ENTRANCE STATION
Hwy 395, 26 miles No./Bishop at Tom's Place
Permits issued starting at 6 am

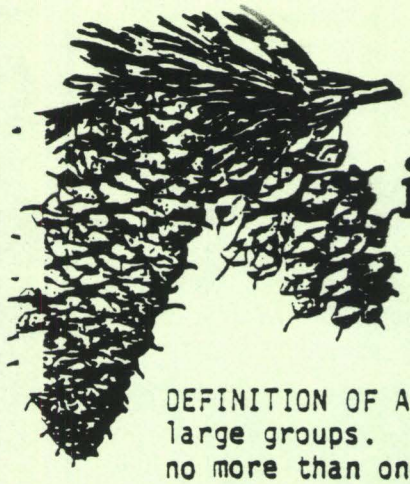
Hilton Creek
Hilton Lakes
Little Lakes Valley
McGee Canyon
Mono Pass
Tamarack Lakes

GLACIER LODGE RESORT
11 miles up Big Pine Canyon Rd.
Permits issued starting at 8 am

Baker Creek
Big Pine Lakes (North Fork)
Big Pine Creek (South Fork)

WHITE MOUNTAIN RANGER STATION
798 North Main, Bishop
Permits issued starting at 7am

Birch Lake
Gable Lakes
Horton Lakes
McGee Canyon
Pine Creek
Red Lake



inyo National Forest news

WHITE MOUNTAIN RANGER DISTRICT

1983 FACT SHEET FOR LARGE AND ORGANIZED GROUPS

DEFINITION OF A LARGE GROUP: Parties of ten or more people are considered large groups. In order to be fair and equitable to all wilderness users, no more than one-third of each total daily trailhead quota will be reserved for parties of 10 or more people. Where party size is only slightly larger than one-third of the quota, the Forest Service is willing to work with the group leader to try to accommodate the group plans.

TRIP SCHEDULING: Although many organized groups publish their trip schedules weeks before the leaders are able to apply for wilderness permits, the Forest Service cannot guarantee that each group will obtain a reservation for the trailhead and date published. We will endeavor to accommodate your plans, but all applications are processed in order of receipt with no individual or group accorded preferential treatment. When announcing trip schedules in the future, inform participants that slight adjustments may have to be made in travel plans due to quota limitations.

APPLYING FOR WILDERNESS PERMITS: In order to aid group leaders in obtaining reservations for wilderness permits with the minimum of delay and frustration, we offer the following suggestions:

1. When making application indicate the minimum size group you will accept in the event that the available quota cannot accommodate your original request.
2. List at least two alternate trailheads and if possible, two alternate starting dates.
3. Request wilderness entry days other than Friday and Saturday as these days are the most difficult to accommodate large groups.
4. Consider splitting your party into two or more smaller groups using different trailheads.
5. Include the leader's day-time telephone number on the application.

WILDERNESS ENTRY DATE: Remember, the date entered on your wilderness reservation card is the date your party must enter the wilderness, not the date you will be arriving in the Eastern Sierra. If you have need of a group meeting spot to organize people and equipment, we suggest you reserve a Group Camp. There are group campgrounds in Big Pine, Bishop Creek, and Rock Creek canyons.

CANCELLATION OF RESERVATION: Please inform this office as soon as possible if your group will not be using all of the reserved spaces or if the trip has been cancelled. Please take the effort to contact us so that others may have the opportunity to obtain reservations.

COMMERCIAL USE: Some group use of wilderness fits the description of commercial use. If this is the case, the group leader will need to apply for an outfitter guide permit. The requested wilderness reservation will be confirmed only after the terms of the outfitter guide permit are met.

NOISE: The most commonly received complaint about organized groups is the amount of noise many groups make. Screaming, shouting commands, blowing whistles when there is no emergency, and loud singing are disruptive and destroys the peace and quiet that is so much a part of the wilderness experience. Please do not bring bugles or musical instruments. It is the leaders' responsibility that their groups' behavior does not disturb other wilderness travelers and wildlife.

MINIMUM IMPACT: With wilderness resources being taxed to the maximum, it is especially important that large groups practice no-trace camping. The enclosed BACKPACKING TRAVEL GUIDE should be reviewed with all party members before entering the wilderness. The Forest Service can suggest training aids and places to camp that can more easily accommodate large groups. This will do much to lessen impact on vegetation and water sources.

Be sure to camp at least 100 feet from both water and trails. Where campfires are allowed, use existing firerings. Do not create new ones. Build small warming fires using small pieces of downed wood. Do not build bonfires as this wastes precious firewood as well as creates a potential wildfire situation. Leave hatchets at home.

If it is necessary to use clothes lines, hang out of sight of all trails and other wilderness travelers.

If your group is able to pack out extra trash, please inform us when you pick up your wilderness permit. We will supply all the burlap trash bags you need.

ALTERNATES TO WILDERNESS USE: There are places to explore outside of Wilderness Areas that will provide learning experiences for those new to backpacking. If you are the leader of such a group and need an easy access area to teach no-trace camping, let us know. We'll be happy to help!

MAIL APPLICATIONS TO: Wilderness Permits
White Mountain Ranger Station
798 North Main Street
Bishop, California 93514

FOR MORE INFORMATION CALL: (619) 873-4207